EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	7031	("0564282").PN. or ((514/269) or (544/301) or (548/131) or (514/365) or (564/306) or (514/613) or (514/646)).CCLS.	US-PGPUB; USPAT	OR	OFF	2008/01/31 17:22
L2	204	1 and phenethylamine	US-PGPUB; USPAT	OR	OFF	2008/01/31 17:23
L3	7	(matsuoka adj hiroharu.inv.)	US-PGPUB	OR	OFF	2008/01/31 17:25
L4	60	(sato adj tsutomu.inv.)	US-PGPUB	OR	OFF	2008/01/31 17:26
L5	4	(takahashi adj tadakatsu.inv.)	US-PGPUB	OR	OFF	2008/01/31 17:27
L6	1316	(kim adj dong.inv.)	US-PGPUB	OR	OFF	2008/01/31 17:27
L7	1478	(kim adj dong ick.inv.)	US-PGPUB	OR	OFF	2008/01/31 17:27
L8	65	(jung adj kyung.inv.)	US-PGPUB	OR	OFF	2008/01/31 17:40
L9	280	(park adj chan.inv.)	US-PGPUB	OR	OFF	2008/01/31 17:41

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          24965 SATO, T?/AU
L33          14 L32 AND SATO, T?/AU

=> d l33, ibib abs fhitstr, 1-14
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Updated Search

09890219

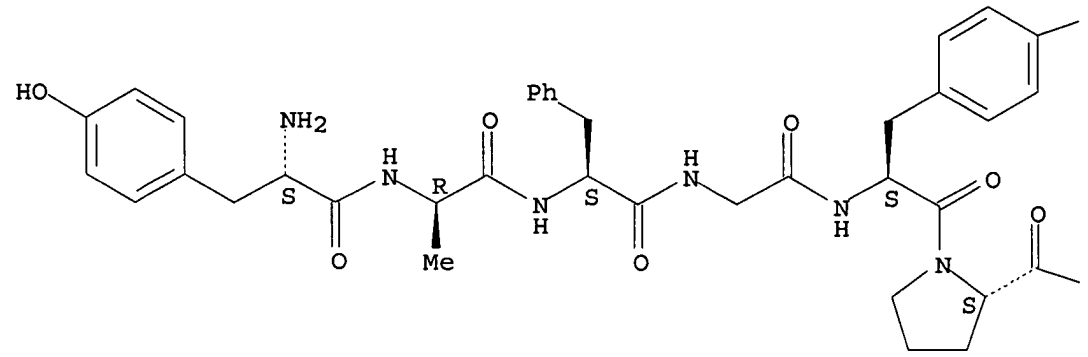
L33 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:285563 HCAPLUS
DOCUMENT NUMBER: 133:84664
TITLE: Selective antagonism by naloxonazine of antinociception by Tyr-d-Arg-Phe-β-Ala, a novel dermorphin analogue with high affinity at μ-opioid receptors
AUTHOR(S): Sakurada, S.; Takeda, S.; Sato, T.; Hayashi, T.; Yuki, M.; Kutsuwa, M.; Tan-No, K.; Sakurada, C.; Kisara, K.; Sakurada, T.
CORPORATE SOURCE: Department of Physiology and Anatomy, Tohoku Pharmaceutical University, Aoba-ku, Sendai, Japan
SOURCE: European Journal of Pharmacology (2000), 395(2), 107-112
CODEN: EJPHAZ; ISSN: 0014-2999
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To examine the role of μ-opioid receptor subtypes, we assessed the antinociceptive effect of H-Tyr-d-Arg-Phe-β-Ala-OH (TAPA), an analog of dermorphin N-terminal peptide in mice, using the tail-flick test. Intracerebroventricularly (i.c.v.) or intrathecally (i.t.) injected TAPA produced potent antinociception with tail-flick as a thermal noxious stimulus. The selective μ1-opioid receptor antagonist, naloxonazine (35 mg/kg, s.c.), or the selective μ-opioid receptor antagonist, β-funaltrexamine, 24 h before testing antagonized the antinociceptive effect of i.t. or i.c.v. TAPA on the response to noxious stimuli. Pretreatment with β-funaltrexamine completely antagonized the antinociception by both i.c.v. and i.t. administered TAPA and [d-Ala2, Me-Phe4, Gly(ol)5]enkephalin (DAMGO). Especially in the tail-flick test, pretreatment with naloxonazine produced a marked rightward displacement of the i.t. TAPA dose-response curve for antinociception. Though DAMGO is a highly selective μ-opioid receptor agonist, pretreatment with naloxonazine partially blocked the antinociceptive response to DAMGO after i.c.v., but not after i.t. injection. These results indicate that TAPA can act as a highly selective μ1-opioid receptor agonist (notable naloxonazine-sensitive receptor agonist) at not only the supraspinal level, but also the spinal level. These data also reveal different antinociceptive mechanisms for DAMGO and for TAPA.
IT 77614-16-5, Dermorphin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(selective antagonism by naloxonazine of antinociception by Tyr-d-Arg-Phe-β-Ala, a novel dermorphin analog with high affinity at μ-opioid receptors)
RN 77614-16-5 HCAPLUS
CN Dermorphin (CA INDEX NAME)

Absolute stereochemistry.

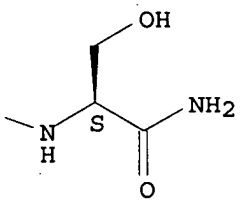
Updated Search

09890219

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:139868 HCAPLUS
DOCUMENT NUMBER: 130:196958
TITLE: Preparation of 3-tert-butyl-L-tyrosinamide-containing peptides and related compounds exhibiting a motilin receptor antagonism
INVENTOR(S): Kotake, Ken-ichiro; Kozono, Toshiro; Sato, Tsutomu; Takanashi, Hisanori
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 144 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9909053	A1	19990225	WO 1998-JP3627	19980814 <--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,

Updated Search

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KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG,
US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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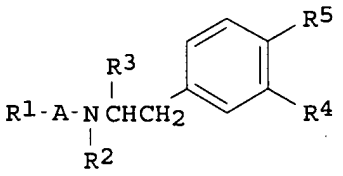
AU 9886490	A	19990308	AU 1998-86490	19980814	<--
AU 741216	B2	20011129			
JP 2000044595	A	20000215	JP 1998-229586	19980814	
JP 3583928	B2	20041104			
EP 1006122	A1	20000607	EP 1998-937826	19980814	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
US 6255285	B1	20010703	US 2000-485620	20000215	

PRIORITY APPLN. INFO.:
JP 1997-255879 A 19970815
JP 1998-186802 A 19980528
WO 1998-JP3627 W 19980814

OTHER SOURCE(S): MARPAT 130:196958

GI



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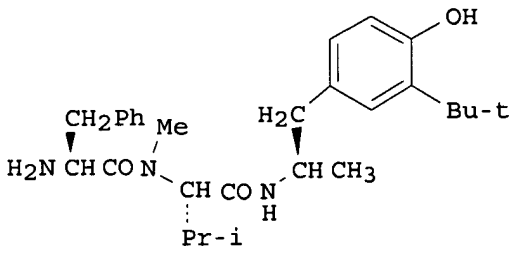


II

AB Phenethylamine derivs. represented by general formula [I; wherein A represents an amino acid or α-substituted amino acid residue; R1 represents R6CO, (un)substituted C2-7 linear or branched alkyl, C3-8 alkenyl, or C3-8 alkynyl; R2 represents hydrogen, C1-3 linear or branched alkyl; R3 represents COR7, (un)substituted C1-5 linear or branched alkyl, C2-5 alkenyl, or C2-5 alkynyl; R4 represents H, C1-6 linear or branched alkyl, C2-6 alkenyl, C2-6 alkynyl, etc.; R5 represents hydroxy or C1-4 n-alkoxy; R6 represents (un)substituted C1-6 linear or branched alkyl, C2-7 alkenyl, or C2-7 alkynyl, optionally benzene- or heterocyclic

Updated Search

ring-condensed C3-7 cycloalkyl, (un)substituted C6-12 aromatic ring, (un)substituted C3-12 (un)saturated heterocyclic ring, (un)substituted NH2, (un)substituted linear or branched C1-5 alkoxy, C2-6 alkenyloxy, C2-6 alkynyloxy, etc.; and R7 represents H, (un)substituted C1-5 linear or branched alkyl, C3-7 cycloalkyl, (un)substituted NH2, OH, linear or branched alkyl C1-6 alkoxy, or C3-7 cycloalkyloxy] are prepared Also claimed are a motilin receptor antagonist, an inhibitor of digestive tract motility, and a remedy for high blood motilin. They are also useful for the treatment of irritable bowel syndrome. Thus, Nα-methyl-N-[2-(3-tert-butyl-4-hydroxyphenyl)-1-methylethyl]-L-valinamide was condensed with Boc-Phe-OH using HOBT and DIC in DMF at room temperature for 2.5 days followed by deprotection with CF3CO2H in CH2Cl2 to give the title compound (II). II in vitro showed IC50 of 1.9 nM for inhibiting the binding of [125I]motilin motilin receptor preparation from rabbit ileum mucous membrane.

IT 220806-34-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 3-tert-butyl-L-tyrosinamide-containing peptide compds. as motilin receptor antagonists, inhibitors of digestive tract motility, and remedy for high blood motilin)

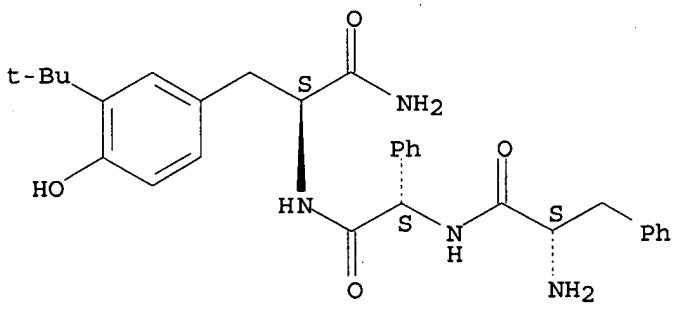
RN 220806-34-8 HCAPLUS

CN L-Tyrosinamide, L-phenylalanyl-(2S)-2-phenylglycyl-3-(1,1-dimethylethyl)-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 220806-33-7
CMF C30 H36 N4 O4

Absolute stereochemistry.



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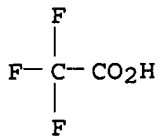

Updated Search

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REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:646501 HCAPLUS
DOCUMENT NUMBER: 121:246501
TITLE: Potent opioid activities of (D-Arg2) dermorphin analogs
AUTHOR(S): Sakurada, Shinobu; Sato, Takumi; Kisara, Kensuke
CORPORATE SOURCE: Tohoku Coll. Pharm., Sendai, 981, Japan
SOURCE: Annual Report of the Tohoku College of Pharmacy (1993), 40, 1-19
CODEN: TYKNAQ; ISSN: 0495-7342
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese

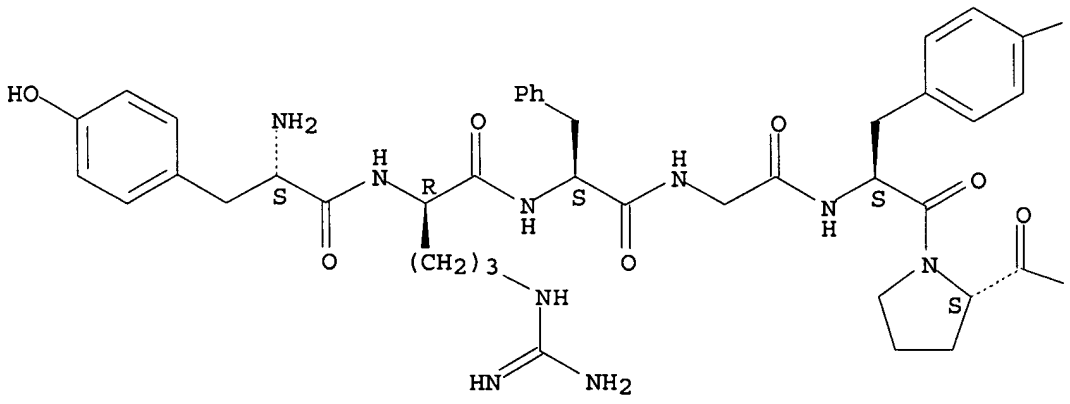
AB Review, with 53 refs. A correlation between dermorphin structure and opioid activities was discussed based on a variety of analogs of (D-Arg2) dermorphin. The minimal structure of opioid activities was the tripeptide of N-terminus for (D-Arg2) dermorphin, although it was the tetrapeptide for dermorphin. Genetic anal. for dermorphin showed that D-Ala was replaced by a post-transformation process.

IT 96425-96-6D, (D-Arg2) dermorphin, analogs
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(opioid activities of dermorphin analogs)

RN 96425-96-6 HCAPLUS
CN Dermorphin, 2-D-arginine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



Updated Search

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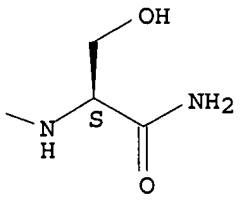

L33 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:228388 HCAPLUS
DOCUMENT NUMBER: 116:228388
TITLE: Comparison of opioid properties between D-Arg-containing dipeptides and tetrapeptides
AUTHOR(S): Sato, Takumi; Sakurada, Shinobu; Sakurada, Tsukasa; Kisara, Kensuke; Suzuki, Kenji
CORPORATE SOURCE: Dep. Pharm., Tohoku Coll. Pharm., Sendai, 981, Japan
SOURCE: Biochemical Pharmacology (1992), 43(4), 717-23
CODEN: BCPCA6; ISSN: 0006-2952
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Since the D-Arg-containing dipeptides, H-Tyr-D-Arg-OMe (TDA) and H-Tyr(Et)-D-Arg-OMe, and the D-Arg2-substituted dermorphin analogs, H-Tyr-D-Arg-Phe-Gly-OTe (TDAPG) and H-Tyr(Et)-D-Arg-Phe-Gly-OEt, gave different pharmacol. responses in vivo, opioid interaction and structure-activity relations have been investigated in vitro. In the isolated guinea pig ileum assay, the tetrapeptides were potently inhibitory, their activity markedly exceeding that of the dipeptides. In particular, the first tetrapeptide had twice the activity of morphine, whereas the potencies of the dipeptides were less than 5% that of morphine. Also, in the opioid receptor binding assay, tetrapeptides had a higher affinity than did the dipeptides. IC50 values of tetrapeptides were 8.46 and 23.7 nM, resp., which were lower than that of morphine. Ethylation of the Tyr residue of TDA much increased the opioid activity, whereas similar modification of TDAPG greatly decreased opioid activity. All peptides used were extremely stable to aminopeptidase-M and carboxypeptidase-Y and had an inhibitory effect on enkephalin (EK)-degrading enzymes. Apparently, the effects of the tetrapeptides are due mainly to specific interaction with opioid receptors, whereas the dipeptides do not act specifically on the opioid receptors, but are involved in non-opioid mechanisms. The resistance to enzymes and inhibitory effect of the peptides used on the EK-degrading enzymes may also account for their potent and long-lasting opioid-like activities.

IT 77614-16-5, Dermorphin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(opioid activity of, structure in relation to)
RN 77614-16-5 HCAPLUS
CN Dermorphin (CA INDEX NAME)

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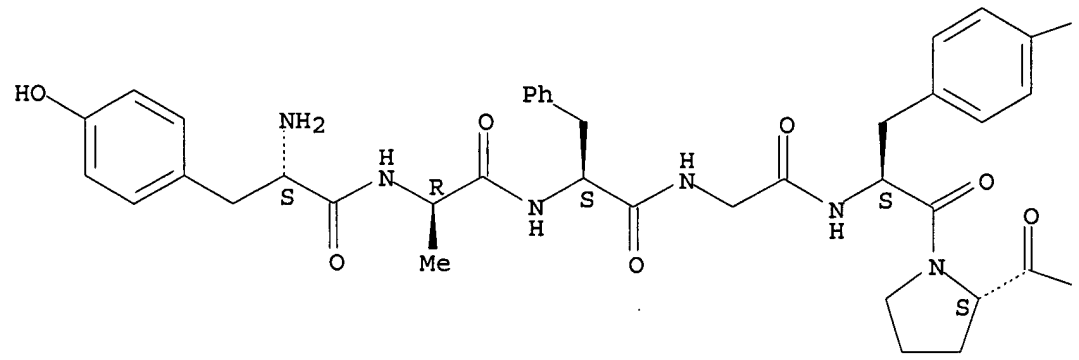
Absolute stereochemistry.

PAGE 1-A



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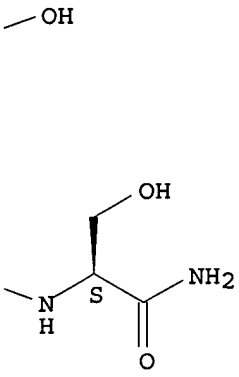


L33 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1990:196672 HCAPLUS
DOCUMENT NUMBER: 112:196672
TITLE: Neutrophil-activating factors and its manufacture with serum-independent human cells
INVENTOR(S): Shionoya, Hiroshi; Koyanagi, Nozomi; Sato, Toshitaka; Kuwata, Manabu; Koide, Jun; Miyoshi, Isao
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01161000	A	19890623	JP 1987-318328	19871216 <--

Updated Search

09890219

PRIORITY APPLN. INFO.: JP 1987-318328 19871216

AB Antitumor and antibacterial neutrophil-activating factor (NAS) having a mol. weight of 25,000 and a partially defined amino acid sequence is manufactured by cultivating serum-independent strain A-6 of cell line MT-2 that is established from human umbilical leukocytes. Thus, strain A-6 isolated from cell line MT-2 was cultivated in the serum-free RPMI-1640 medium. The medium was subsequently condensed, chromatographed, gel-filtered in presence of 6 M urea, and purified by the reverse-phased HPLC to obtain NAS. The effect of NAS on antitumor activity of neutrophiles against mast cell tumor P815 was demonstrated.

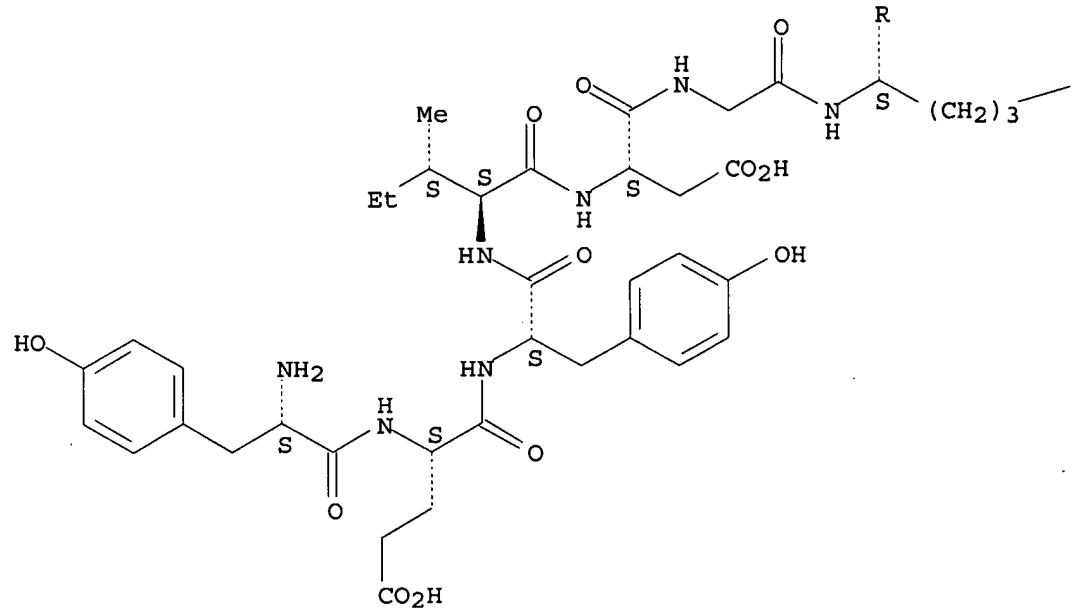
IT 126738-60-1
RL: BIOL (Biological study)
(amino acid sequence in neutrophil-activating factor)

RN 126738-60-1 HCAPLUS

CN L-Serine, N-[N2-[N-[N-[N-[N-(N-L-tyrosyl-L-α-glutamyl)-L-tyrosyl]-L-isoleucyl]-L-α-aspartyl]glycyl]-L-arginyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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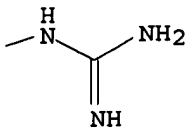

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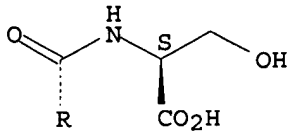
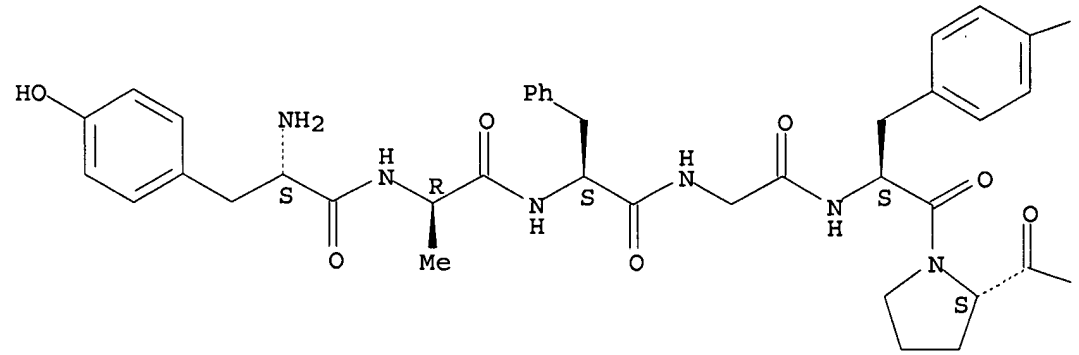
PAGE 2-A



L33 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:108356 HCAPLUS
DOCUMENT NUMBER: 110:108356
TITLE: Comparison of the antinociceptive effects of new [D-Arg2]-dermorphin tetrapeptide analogs and morphine in mice
AUTHOR(S): Chaki, Kyoji; Sakurada, Shinobu; Sakurada, Tsukasa; Sato, Takumi; Kawamura, Shunsuke; Kisara, Kensuke; Watanabe, Hiromi; Suzuki, Kenji
CORPORATE SOURCE: Dep. Pharmacol., Tohoku Coll. Pharm., Sendai, 981, Japan
SOURCE: Pharmacology, Biochemistry and Behavior (1988), 31(2), 439-44
CODEN: PBBHAU; ISSN: 0091-3057
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The antinociceptive effects of synthetic dermorphin tetrapeptide analogs containing D-Arg in position 2, H-Tyr-D-Arg-Phe-Gly-NH2 and H-Tyr-D-Arg-Phe-β-Ala-OH, were measured in mice by the tail-pressure test. The antinociceptive effect produced by intracerebroventricular (ICV), intrathecal (IT), and s.c. administration of either peptide was greater than that produced by morphine. Oral administration of the peptides showed approx. the same antinociceptive potency as morphine. In addition, the antinociceptive effect produced by s.c. or oral administration of either peptide was of longer duration than morphine. Pretreatment with naloxone resulted in early complete antagonism of the antinociceptive effects produced by ICV and IT administration of either peptide or morphine. Dose ratios (ICV/IT) or H-Tyr-D-Arg-Phe-Gly-NH2 and H-Tyr-D-Arg-Phe-β-Ala-OH, which were calculated from the AD50 (Antinociceptive Dose = 50% maximal possible effect) values, were 5.8 and 6.2, resp., whereas that of morphine was only 1.46. Thus, the mechanisms of the antinociceptive effects of [D-Arg2]-dermorphin tetrapeptide analogs apparently differ from those of morphine, and these peptides may possess higher affinities than does morphine for opioid receptors in the spinal cord.
IT 77614-16-5D, Dermorphin, analogs
RL: BIOL (Biological study)
(antinociceptive activity of, administration route and structure in relation to)
RN 77614-16-5 HCAPLUS
CN Dermorphin (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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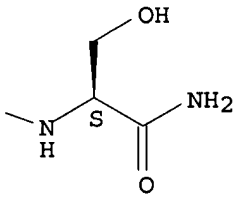


L33 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:16814 HCAPLUS
DOCUMENT NUMBER: 108:16814
TITLE: Production and characterization of monoclonal antibodies against amino-terminus of human α-atrial natriuretic polypeptide
AUTHOR(S): Naomi, Shojiro; Umeda, Teruhisa; Sato, Tatsuo ; Harada, Nobuyuki; Tominaga, Akira; Takatsu, Kiyoshi
CORPORATE SOURCE: Med. Sch., Kumamoto Univ., Kumamoto, 860, Japan
SOURCE: Hybridoma (1987), 6(4), 433-40
CODEN: HYBRDY; ISSN: 0272-457X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Monoclonal antibodies directed against human α-atrial natriuretic polypeptide (α-ANP; human, 1-28) were obtained by somatic cell fusion between P3-X63-Ag8.653 myeloma cells and spleen cells from a BALB/c mouse immunized with human α-ANP selectively coupled to keyhole limpet hemocyanin. From the anal. of polyclonal sera with respect to determinant specificity before the fusion, the strategy was primarily used to pick up monoclonal antibody specific for the N-terminal residues of human α-ANP. Screenings of antibodies in the hybridoma culture supernatants were performed by binding to iodinated synthetic human

α-ANP. Two stable clones producing anti-human α-ANP antibodies, designated 13A1 and 10B1, were obtained by the limiting dilution technique. The ability of ANP (rat, 1-28) to inhibit binding of 125I-labeled human α-ANP to these antibodies was almost equipotent to ANP (human, 1-28). However, ANP fragments (human, 7-28) and (18-28) did not inhibit the binding completely. Apparently both 13A1 and 10B1 monoclonal antibodies can specifically recognize the N-terminus of human α-ANP, and may be useful tools to investigate receptor binding of human α-ANP by the antagonizing effect.

IT 88898-17-3, Rat atrial natriuretic peptide 1-28
RL: BIOL (Biological study)
(atriopeptin monoclonal antibodies reaction with)

RN 88898-17-3 HCAPLUS

CN Atrial natriuretic peptide-28 (rat) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L33 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:591140 HCAPLUS

DOCUMENT NUMBER: 107:191140

TITLE: Opioid activities of D-Arg2-substituted tetrapeptides

AUTHOR(S): Sato, Takumi; Sakurada, Shinobu; Sakurada, Tsukasa; Furuta, Seiichi; Chaki, Kyoji; Kisara, Kensuke; Sasaki, Yusuke; Suzuki, Kenji

CORPORATE SOURCE: Dep. Pharmacol., Tohoku Coll. Pharm., Sendai, 983, Japan

SOURCE: Journal of Pharmacology and Experimental Therapeutics (1987), 242(2), 654-9
CODEN: JPETAB; ISSN: 0022-3565

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The antinociceptive effects and mechanisms of action of H-Tyr-D-Ala-Phe-Gly-OH, H-Tyr-D-Arg-Phe-Gly-OH, and H-Tyr-D-Arg-Phe-sarcosine(Sar)-OH were investigated. The ED50 values of these peptides were 510.0, 8.2, and 2.0 pmol, resp., when administered intracerebroventricularly in the mouse tail-pressure test (dermorphin = 5.7 pmol and morphine = 1.2 nmol). These activities were remarkably potent and relatively long lasting. Their IC50 values were 676.8, 23.1, and 6.6 nM, resp. (dermorphin = 3.75 and morphine = 214.3 nM) in the guinea pig isolated ileum assay, and 138.50, 5.25, and 1.10 nM, resp. (dermorphin = 3.80 and morphine = 28.00 nM) in the radioreceptor assay utilizing [3H]naloxone as the opioid receptor ligand. In the evaluation of their inhibitory effects to enkephalin-degrading enzymes, the IC50 values of H-Tyr-D-Arg-Phe-Gly-OH, H-Tyr-D-Arg-Phe-Sar-OH, and H-Tyr-D-Ala-Phe-Gly-OH were 5.4, 14.5, and >50.0 μM, resp. (bestatin = 0.1 μM) against aminopeptidase and 1.18, 1.40, >50.0 μM, resp. (captopril = 0.38 and D-Phe-2S-,3R-3-amino-2-hydroxy-4-phenylbutanoic acid = >100 μM) against the cleaving enzymes of enkephalin at its Gly3-Phe4 bond. Evidently, the marked antinociceptive potency of H-Tyr-D-Arg-Phe-Gly-OH and H-Tyr-D-Arg-Phe-Sar-OH is mainly due to high opioid receptor affinity. Their inhibitory effects on enkephalin-degrading enzymes and enzymic stability also greatly contribute to their potent and long-lasting opioid activities. Structure-activity relations of the tetrapeptides are discussed.

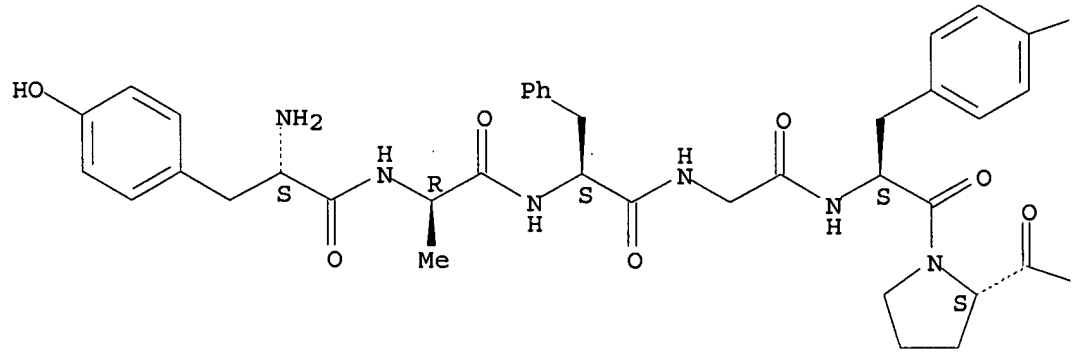
IT 77614-16-5, Dermorphin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(analgesic activity of, mol. structure in relation to)

09890219

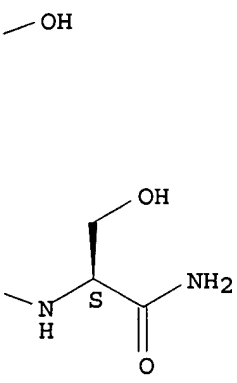
RN 77614-16-5 HCAPLUS
CN Dermorphin (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L33 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:102638 HCAPLUS
DOCUMENT NUMBER: 104:102638
ORIGINAL REFERENCE NO.: 104:16102h,16103a
TITLE: Dermorphin analogs containing D-kyotorphin: structure-antinociceptive relationships in mice
AUTHOR(S): Kisara, Kensuke; Sakurada, Shinobu; Sakurada, Tsukasa; Sasaki, Yusuke; Sato, Takumi; Suzuki, Kenji; Watanabe, Hiromi
CORPORATE SOURCE: Dep. Pharmacol., Tohoku Coll. Pharm., Sendai, 983, Japan
SOURCE: British Journal of Pharmacology (1986), 87(1), 183-9
CODEN: BJPCBM; ISSN: 0007-1188
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The antinociceptive effects of synthetic dermorphin [77614-16-5

Updated Search

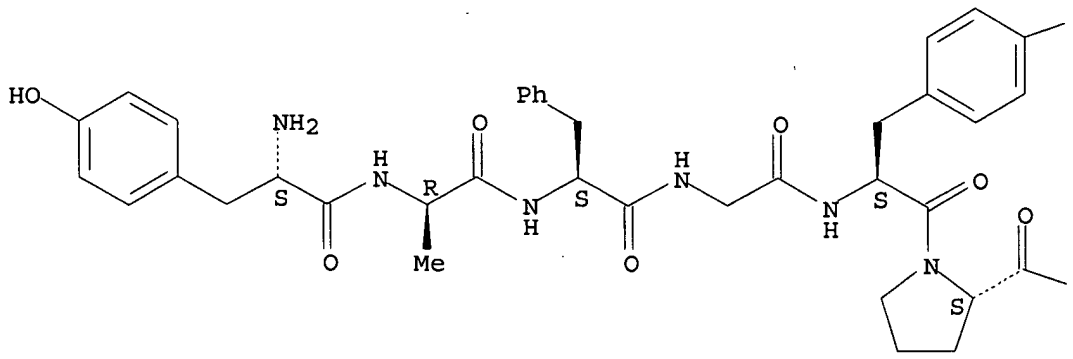
] and its analogs containing D-arginine (D-Arg) in position 2 injected into the lateral cerebroventricle were examined in conscious mice. Intracerebroventricular (i.c.v.) administration of dermorphin and [D-Arg2]-dermorphin [96425-96-6] produced potent and long-lasting antinociceptive activity as assayed by the tail-pressure test. Dermorphin and [D-Arg2]-dermorphin were 210- and 52-fold more potent than morphine, resp. The antinociceptive effects produced by these heptapeptides were antagonized by a low dose (0.5 mg/kg, i.p.) of the opioid antagonist naloxone. The concentration levels for half-maximal antinociception for [D-Arg2]-dermorphin-(1-6) [100304-61-8], -(1-5) [100304-62-9], and -(1-4) [100304-60-7] were different from that for [D-Arg2]-dermorphin. The shortest fragment, [D-Arg2]-dermorphin-(1-2) [100304-63-0], had little activity, whereas [D-Arg2]-dermorphin-(1-3) [83934-32-1] exhibited activity and was 10-fold more potent than morphine. [D-Arg2]-dermorphin analogs showed almost identical effects when tested on the elec. induced contractions of the guinea pig isolated ileum. Evidently, the presence of the N-terminal tripeptide in the structure of [D-Arg2]-dermorphin is of crucial importance for the manifestation of the full intrinsic opioid-like antinociceptive activity of [D-Arg2]-dermorphin, which is presumably mediated through opioid receptors in the brain.

IT 77614-16-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(analgesic action of, mol. structure in relation to)

RN 77614-16-5 HCAPLUS
CN Dermorphin (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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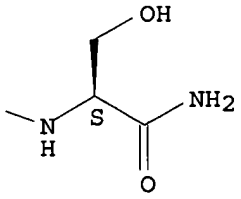


L33 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:34327 HCAPLUS
DOCUMENT NUMBER: 104:34327
ORIGINAL REFERENCE NO.: 104:5652h,5653a
TITLE: Studies on analgesic oligopeptides. III. Synthesis and analgesic activity after subcutaneous administration of [D-Arg2]dermorphin and its N-terminal tetrapeptide analogs
AUTHOR(S): Sasaki, Yusuke; Matsui, Michiko; Fujita, Hiroki; Hosono, Masahiro; Taguchi, Masumi; Suzuki, Kenji; Sakurada, Shinobu; Sato, Takumi; Sakurada, Tsukasa; Kisara, Kensuke
CORPORATE SOURCE: Tohoku Coll. Pharm., Sendai, 983, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1985), 33(4), 1528-36
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 104:34327

AB [D-Arg2]dermorphin (H-Tyr-D-Arg-Phe-Gly-Tyr-Pro-Ser-NH2) and 19 N-terminal tetrapeptide analogs, e.g., H-Tyr-D-Arg-Phe-Gly-OH (I), were prepared by the conventional solution method and their analgesic activities after s.c. administration to mice were assessed by the tail-pressure test. [D-Arg2]dermorphin had analgesic potency equal to or slightly greater than that of dermorphin. I showed a potency 4.8 times that of morphine and comparable with that of dermorphin on a molar basis. Several analogs in which Gly4 was replaced by sarcosine or D-Ala exhibited activity greater than that of I. Replacement of Gly4 by Pro, Leu, or D-leu resulted in a marked decrease in potency, and replacement of either Phe3 by other aromatic amino acids or D-Arg2 by other basic D-amino acids gave analogs with greatly decreased activities. However, one analog whose guanidino functionality on D-Arg2 was blocked by a nitro group, showed activity one-third that of the parent peptide I. The structure-activity relationship for the tetrapeptide is discussed.

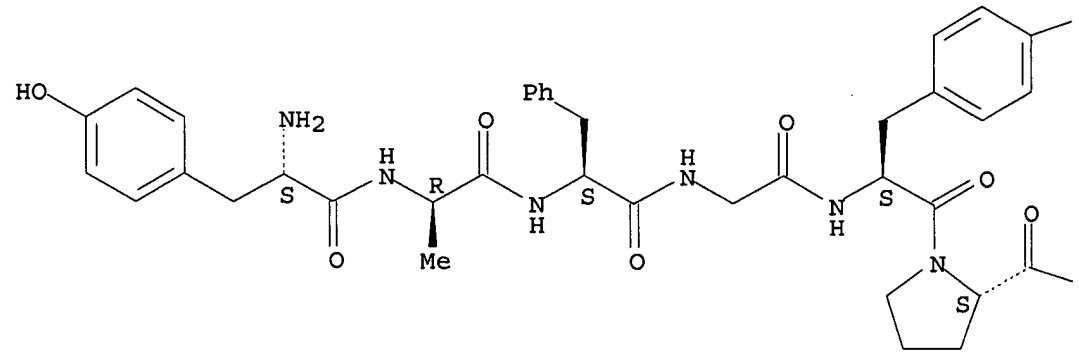
IT 77614-16-5DP, N-terminal tetrapeptide analogs
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and analgesic activity of)
RN 77614-16-5 HCAPLUS
CN Dermorphin (CA INDEX NAME)

Updated Search

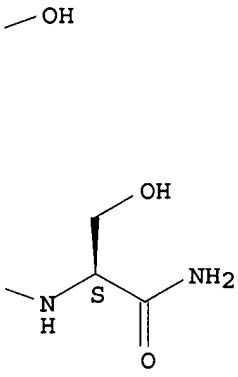
09890219

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L33 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:400760 HCAPLUS
DOCUMENT NUMBER: 103:760
ORIGINAL REFERENCE NO.: 103:143a,146a
TITLE: A comparison of the antinociceptive and behavioral effects of D-Arg-substituted dipeptides and tetrapeptides in mice
AUTHOR(S): Sato, Takumi; Sakurada, Shinobu; Sakurada, Tsukasa; Kisara, Kensuke; Sasaki, Yusuke; Suzuki, Kenji
CORPORATE SOURCE: Dep. Pharmacol., Tohoku Coll. Pharm., Sendai, 983, Japan
SOURCE: Peptides (New York, NY, United States) (1985), 6(1), 35-40
CODEN: PPTDD5; ISSN: 0196-9781
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Intracerebroventricular administration of D-arginine (D-Arg)-substituted dipeptides, H-Tyr-D-Arg-OMe [92758-99-1] and H-Tyr(Et)-D-Arg-OMe

Updated Search

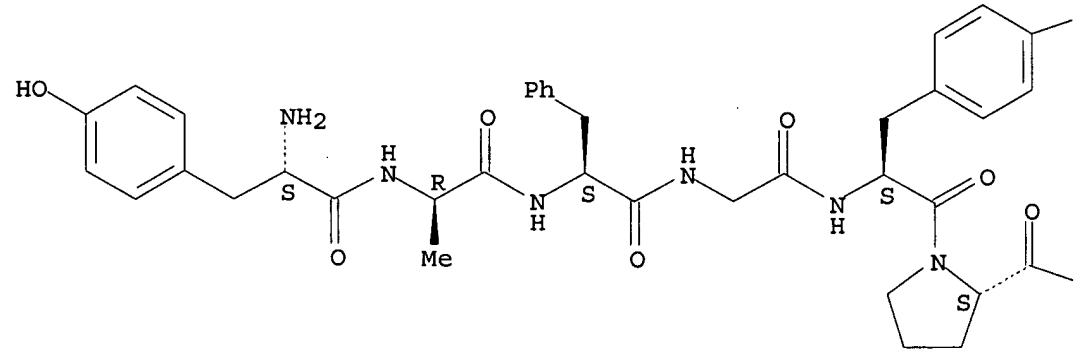
[92759-00-7] and D-Arg2-substituted N-terminal tetrapeptides of dermorphin [77614-16-5], H-Tyr-D-Arg-Phe-Gly-OEt [90549-84-1] and H-Tyr(Et)-D-Arg-Phe-Gly-OEt [92759-01-8] resulted in dose-related and naloxone-reversible antinociceptive effects. Among them, tetrapeptides not only exhibited much more potent and prolonged activities than dipeptides but also were significantly antagonized even by a low dose of naloxone. Spontaneous motor activity was lowered by dipeptides throughout the observation period, which was scarcely antagonized by naloxone. Tetrapeptides elicited locomotor hyperactivity following an initial locomotor suppression. Only the locomotor hyperactivity was significantly antagonized by naloxone. Evidently, tetrapeptides induce their effects via opioid receptors, whereas the effects of dipeptides are nonspecifically involved in various systems.

IT 77614-16-5
RL: BIOL (Biological study)
(locomotion-affecting activity of, structure in relation to)

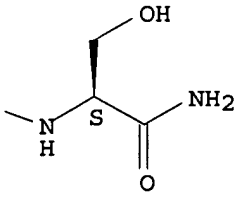
RN 77614-16-5 HCAPLUS
CN Dermorphin (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L33 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN

Updated Search

09890219

ACCESSION NUMBER: 1985:198185 HCAPLUS
DOCUMENT NUMBER: 102:198185
ORIGINAL REFERENCE NO.: 102:30939a,30942a
TITLE: The analgesic activity of D-Arg2-dermorphin and its N-terminal tetrapeptide analogs after subcutaneous administration in mice
AUTHOR(S): Sasaki, Y.; Matsui, M.; Fujita, H.; Hosono, M.; Taguchi, M.; Suzuki, K.; Sakurada, S.; Sato, T.; Sakurada, T.; Kisara, K.
CORPORATE SOURCE: Tohoku Coll. Pharm., Sendai, 983, Japan
SOURCE: Neuropeptides (Edinburgh, United Kingdom) (1985), 5(4-6), 391-4
CODEN: NRPPDD; ISSN: 0143-4179
DOCUMENT TYPE: Journal
LANGUAGE: English

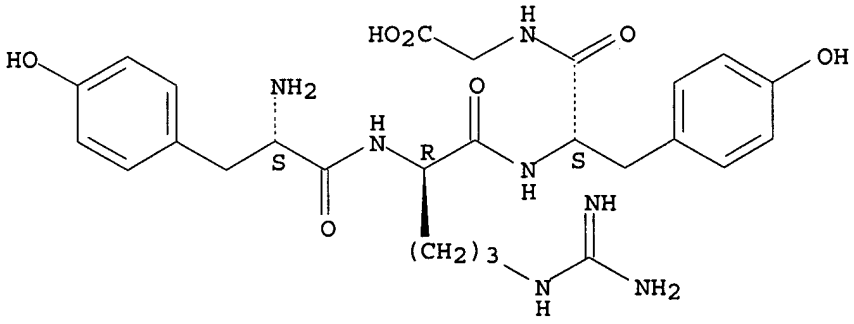
AB 2-D-Arginine-dermorphin (I) [96425-96-6] and 19 N-terminal tetrapeptide analogs were prepared, and their analgesic activities were determined by the tail pressure test after s.c. administration in mice. The stability of a tetrapeptide I analog to enzymic degradation was also examined

I

had analgesic potency equal to or slightly greater than that of dermorphin. In a series of tetrapeptide I analogs, a very pronounced activity greater than that of morphine was observed for analogs of the following structure, H-Tyr-D-Arg-Phe-X-OH (X = Gly, sarcosine, and D-Ala) and their esters. Replacement of the 2-D-arginine residue by D-nitroarginine, D-homoarginine, or D-lysine decreased the potency, suggesting that the guanidino group and side chain length of D-arginine are of great importance for a higher activity. The tetrapeptide H-Tyr-D-Arg-Phe-Gly-OH was more stable than the parent tetrapeptide (H-Tyr-D-Ala-Phe-Gly-OH) to cleavage by aminopeptidase M [9054-63-1] and carboxypeptidase Y [9046-67-7].

IT 96425-89-7
RL: BIOL (Biological study)
(analgesia from, mol. structure in relation to)
RN 96425-89-7 HCAPLUS
CN Glycine, N-[N-(N2-L-tyrosyl-D-arginyl)-L-tyrosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1984:584204 HCAPLUS
DOCUMENT NUMBER: 101:184204
ORIGINAL REFERENCE NO.: 101:27729a,27732a
TITLE: Comparison of the antinociceptive effect between D-Arg containing dipeptides and tetrapeptides in mice

Updated Search

09890219

AUTHOR(S): Sato, T.; Sakurada, S.; Sakurada, T.; Furuta, S.; Nakata, N.; Kisara, K.; Sasaki, Y.; Suzuki, K.

CORPORATE SOURCE: Dep. Pharmacol., Tohoku Coll. Pharm., Sendai, 983, Japan

SOURCE: Neuropeptides (Edinburgh, United Kingdom) (1984), 4(4), 269-79
CODEN: NRPPDD; ISSN: 0143-4179

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The D-arginine-containing dipeptides, H-Tyr-D-Arg-OMe [92758-99-1] and H-Tyr(Et)-D-Arg-OMe [92759-00-7], and D-arginine-substituted N-terminal tetrapeptides of dermorphin, H-Tyr-D-Arg-Phe-Gly-OEt [90549-84-1] and H-Tyr(Et)-D-Arg-Phe-Gly-OEt [92759-01-8] administered intracerebroventricularly exhibited dose-dependent antinociceptive activities in mice as measured by the tail-pressure and phenylbenzoquinone writhing tests. The effects of these peptides were antagonized by pretreatment with naloxone, indicating that these effects are produced through opioid receptors. The tetrapeptides were very potent (half-maximum ED = 12.5 and 355.0 pmole in the tail-pressure test and 3.1 and 53.0 pmole in the phenylbenzoquinone writhing test, resp.) much more so and more prolonged than those of morphine and the dipeptides used. The difference in peak response times and the degree of antagonism by naloxone indicates that the dipeptides and tetrapeptides act on different sites in the central nervous system.

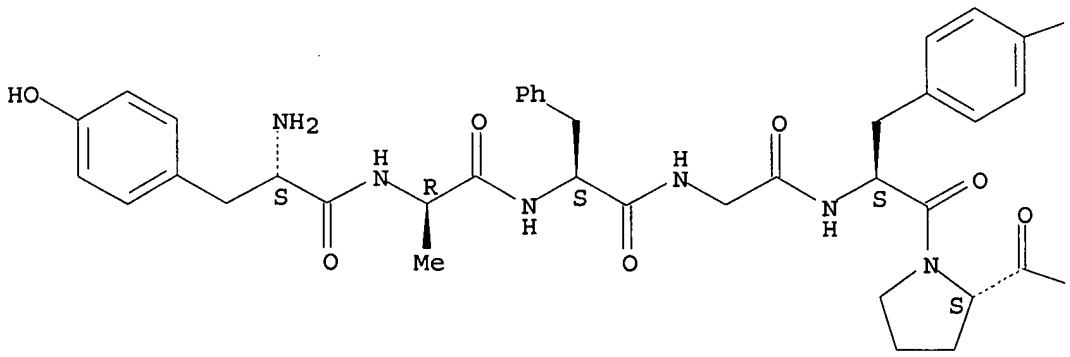
IT 77614-16-5D, analogs
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(analgesic activity of)

RN 77614-16-5 HCAPLUS

CN Dermorphin (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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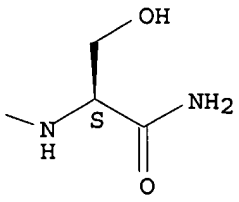
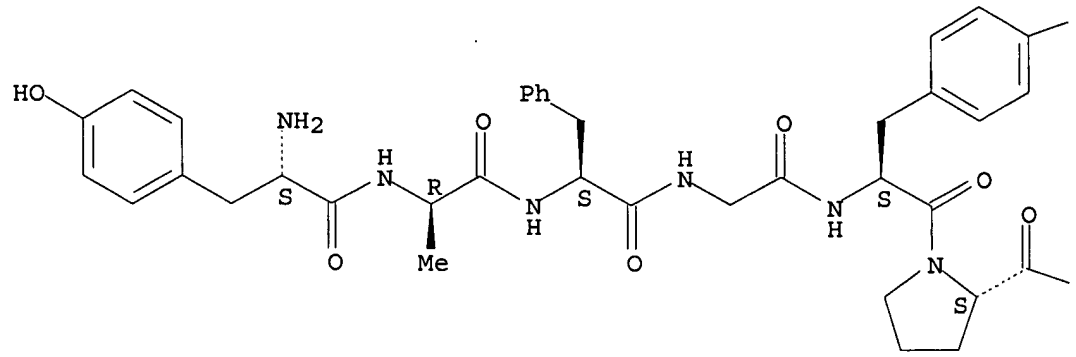


L33 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1984:400927 HCAPLUS
DOCUMENT NUMBER: 101:927
ORIGINAL REFERENCE NO.: 101:151a,154a
TITLE: D-Arg2-dermorphin tetrapeptide analogs: a potent and long-lasting analgesic activity after subcutaneous administration
AUTHOR(S): Sasaki, Yusuke; Matsui, Michiko; Taguchi, Masumi; Suzuki, Kenji; Sakurada, Shinobu; Sato, Takumi ; Sakurada, Tsukasa; Kisara, Kensuke
CORPORATE SOURCE: Tohoku Coll. Pharm., Sendai, 983, Japan
SOURCE: Biochemical and Biophysical Research Communications (1984), 120(1), 214-18
CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To determination the pharmacol. properties of [D-Arg2]dermorphin tetrapeptides, 6
tetrapeptide analogs based on the following formulas, H-Tyr-D-Arg-Phe-Gly-OX (X = H, Et, n-propyl), H-Tyr-D-Arg-Phe-Sar-OX (X = H, Me, Et), were prepared All these analogs exhibited highly potent and long-lasting analgesia as compared with that of morphine after s.c. administration into mice. Among analogs tested, H-Tyr-D-Arg-Phe-Sar-OH showed the highest activities, which were 21, 30, and 58 times more active than morphine in the tail pressure, tail flick,and phenylbenzoquinone writhing tests, resp., on a molar basis.
IT 77614-16-5DP, analogs
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and analgesic activity of)
RN 77614-16-5 HCAPLUS
CN Dermorphin (CA INDEX NAME)

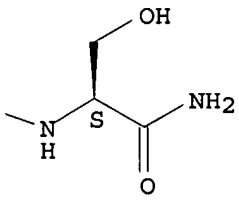
Absolute stereochemistry.

09890219

PAGE 1-A



PAGE 1-B



Updated Search

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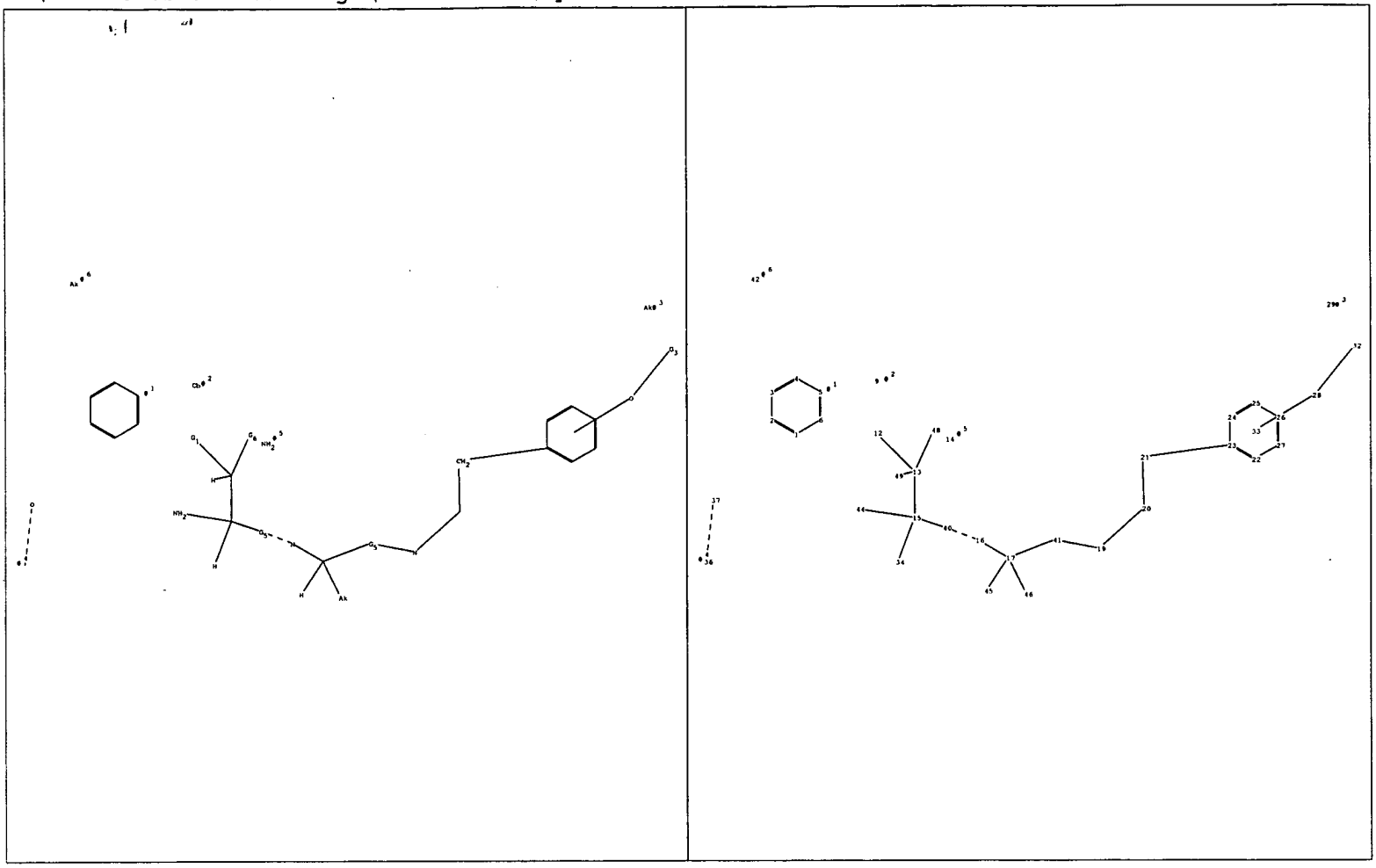

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9 12 13 14 15 16 17 19 20 21 28 29 32 34 36 37 40 41 42 44 45 46
48 49
ring nodes :
1 2 3 4 5 6 22 23 24 25 26 27
chain bonds :
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19-20 19-41 20-21 21-23 28-32 36-37
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 22-23 22-27 23-24 24-25 25-26 26-27
exact/norm bonds :
12-13 13-48 15-40 15-44 16-17 16-40 17-41 17-46 19-20 19-41 28-32 36-37
exact bonds :
13-15 13-49 15-34 17-45 20-21 21-23
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 22-23 22-27 23-24 24-25 25-26 26-27
isolated ring systems :
containing 1 : 22 :

G1:[*1],[*2]

G3:H,[*3]

G5:CH2,[*4]

G6:OH,[*5],[*6]

17

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Connectivity :
    29:1 E exact RC ring/chain  46:3 X maximum RC ring/chain
Match level :
    1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  9:Atom  12:CLASS  13:CLASS  14:CLASS
    15:CLASS  16:CLASS  17:CLASS  19:CLASS  20:CLASS  21:CLASS  22:Atom  23:Atom  24:Atom
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    37:CLASS  40:CLASS  41:CLASS  42:CLASS  44:CLASS  45:CLASS  46:CLASS  48:CLASS  49:CLASS
Generic attributes :
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    Saturation              : Saturated
    Number of Carbon Atoms  : less than 7
    Type of Ring System     : Monocyclic
    29:
    Type of chain           : Linear
    Saturation              : Saturated
    Number of Carbon Atoms  : less than 7
    42:
    Saturation              : Saturated
    Number of Carbon Atoms  : less than 7
    46:
    Saturation              : Saturated
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09890219

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NEWS 3	AUG 06	FSTA enhanced with new thesaurus edition
NEWS 4	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents
NEWS 5	AUG 20	CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 6	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 7	AUG 27	USPATOLD now available on STN
NEWS 8	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 9	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 10	SEP 13	FORIS renamed to SOFIS
NEWS 11	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS 12	SEP 17	CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 13	SEP 17	CAplus coverage extended to include traditional medicine patents
NEWS 14	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15	OCT 02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 16	OCT 19	BEILSTEIN updated with new compounds
NEWS 17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS 18	NOV 19	WPIX enhanced with XML display format
NEWS 19	NOV 30	ICSD reloaded with enhancements
NEWS 20	DEC 04	LINPADOCDB now available on STN
NEWS 21	DEC 14	BEILSTEIN pricing structure to change
NEWS 22	DEC 17	USPATOLD added to additional database clusters
NEWS 23	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS 24	DEC 17	DGENE now includes more than 10 million sequences
NEWS 25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS 26	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27	DEC 17	CA/CAplus enhanced with new custom IPC display formats
NEWS 28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS 29	JAN 02	STN pricing information for 2008 now available
NEWS 30	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 31	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 32	JAN 28	MARPAT searching enhanced

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09890219

NEWS 33 JAN 28 USGENE now provides USPTO sequence data within 3 days of publication
NEWS 34 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 35 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:56:28 ON 31 JAN 2008

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:56:34 ON 31 JAN 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 30 JAN 2008 HIGHEST RN 1001156-45-1
DICTIONARY FILE UPDATES: 30 JAN 2008 HIGHEST RN 1001156-45-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Documents and Settings\brobinson1\My Documents\stnweb\Queries\anfhturu.str

Updated Search

09890219

```
L1      STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l1
SAMPLE SEARCH INITIATED 11:59:02 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     8146 TO ITERATE

 24.6% PROCESSED     2000 ITERATIONS                                  0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:       157510 TO   168330
PROJECTED ANSWERS:               0 TO        0

L2            0 SEA SSS SAM L1

=> s l1 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 11:59:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   162701 TO ITERATE

100.0% PROCESSED   162701 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.03

L3            0 SEA SSS FUL L1

=>
Uploading C:\Documents and Settings\brobinson1\My
Documents\stnweb\Queries\anfhru.str

L4      STRUCTURE UPLOADED

=> d l4
L4 HAS NO ANSWERS
L4              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l4
SAMPLE SEARCH INITIATED 12:01:35 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     8146 TO ITERATE

 24.6% PROCESSED     2000 ITERATIONS                                  0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)


Updated Search
```

09890219

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 157510 TO 168330
PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L4

=> s l4 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 12:01:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 162701 TO ITERATE

100.0% PROCESSED 162701 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.03

L6 0 SEA SSS FUL L4

=>
Uploading C:\Documents and Settings\brobinson1\My Documents\stnweb\Queries\b.str

L7 STRUCTURE UPLOADED

=> d l7
L7 HAS NO ANSWERS
L7 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l7
SAMPLE SEARCH INITIATED 12:03:52 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 34713 TO ITERATE

5.8% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 683123 TO 705397
PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L7

=> s l7 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 12:03:56 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 694747 TO ITERATE

97.5% PROCESSED 677053 ITERATIONS 0 ANSWERS

100.0% PROCESSED 694747 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.29

Updated Search

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```
L9             0 SEA SSS FUL L7

=>
Uploading C:\Documents and Settings\brobinson1\My Documents\stnweb\Queries\bhvc.str

L10      STRUCTURE UPLOADED

=> s l10
SAMPLE SEARCH INITIATED 12:06:48 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    45091 TO ITERATE

  4.4% PROCESSED     2000 ITERATIONS                                0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       889141 TO   914499
PROJECTED ANSWERS:               0 TO        0

L11            0 SEA SSS SAM L10

=> s l10 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 12:07:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   901698 TO ITERATE

 95.9% PROCESSED   864765 ITERATIONS                                0 ANSWERS

 98.8% PROCESSED   891297 ITERATIONS                                0 ANSWERS

100.0% PROCESSED   901698 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.33

L12            0 SEA SSS FUL L10

=>
Uploading C:\Documents and Settings\brobinson1\My Documents\stnweb\Queries\bcds.str

L13      STRUCTURE UPLOADED

=> d l13
L13 HAS NO ANSWERS
L13              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l13
SAMPLE SEARCH INITIATED 12:11:40 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    45073 TO ITERATE

  4.4% PROCESSED     2000 ITERATIONS                               50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01


Updated Search
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```
FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:       888784 TO   914136
PROJECTED ANSWERS:           21384 TO    25490

L14          50 SEA SSS SAM L13

=>
Uploading C:\Documents and Settings\brobinson1\My Documents\stnweb\Queries\mmopl.str

L15     STRUCTURE UPLOADED

=> s l15
SAMPLE SEARCH INITIATED 12:13:28 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    40041 TO ITERATE

  5.0% PROCESSED     2000 ITERATIONS                                  6 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:       788866 TO   812774
PROJECTED ANSWERS:            1745 TO     3059

L16           6 SEA SSS SAM L15

=>
=>
Uploading C:\Documents and Settings\brobinson1\My Documents\stnweb\Queries\bvgf.str

L17     STRUCTURE UPLOADED

=> s l17
SAMPLE SEARCH INITIATED 12:15:39 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    40049 TO ITERATE

  5.0% PROCESSED     2000 ITERATIONS                                  9 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:       789024 TO   812936
PROJECTED ANSWERS:            2799 TO     4409

L18           9 SEA SSS SAM L17

=>
Uploading C:\Documents and Settings\brobinson1\My
Documents\stnweb\Queries\anfhutyr.str

L19     STRUCTURE UPLOADED

=> s l19
SAMPLE SEARCH INITIATED 12:18:13 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    40049 TO ITERATE
```

Updated Search

09890219

5.0% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 789024 TO 812936
PROJECTED ANSWERS: 0 TO 0

L20 0 SEA SSS SAM L19

=> s l19 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 12:18:20 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 799284 TO ITERATE

97.7% PROCESSED 780833 ITERATIONS 0 ANSWERS

100.0% PROCESSED 799284 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.27

L21 0 SEA SSS FUL L19

=>
Uploading C:\Documents and Settings\brobinson1\My Documents\stnweb\Queries\cxdre.str

L22 STRUCTURE UPLOADED

=> s l22
SAMPLE SEARCH INITIATED 12:19:58 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 40049 TO ITERATE

5.0% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 789024 TO 812936
PROJECTED ANSWERS: 0 TO 0

L23 0 SEA SSS SAM L22

=> s l22 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 12:20:03 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 799284 TO ITERATE

97.6% PROCESSED 780471 ITERATIONS 0 ANSWERS

100.0% PROCESSED 799284 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.28

L24 0 SEA SSS FUL L22

=> d his

Updated Search

09890219

(FILE 'HOME' ENTERED AT 11:56:28 ON 31 JAN 2008)

FILE 'REGISTRY' ENTERED AT 11:56:34 ON 31 JAN 2008

```
L1             STRUCTURE UPLOADED
L2           0 S L1
L3           0 S L1 FULL
L4             STRUCTURE UPLOADED
L5           0 S L4
L6           0 S L4 FULL
L7             STRUCTURE UPLOADED
L8           0 S L7
L9           0 S L7 FULL
L10            STRUCTURE UPLOADED
L11          0 S L10
L12          0 S L10 FULL
L13            STRUCTURE UPLOADED
L14         50 S L13
L15            STRUCTURE UPLOADED
L16          6 S L15
L17            STRUCTURE UPLOADED
L18          9 S L17
L19            STRUCTURE UPLOADED
L20          0 S L19
L21          0 S L19 FULL
L22            STRUCTURE UPLOADED
L23          0 S L22
L24          0 S L22 FULL

=> s l18 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 12:20:54 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   799284 TO ITERATE

 96.4% PROCESSED   770612 ITERATIONS                          2635 ANSWERS

100.0% PROCESSED   799284 ITERATIONS                          2744 ANSWERS
SEARCH TIME: 00.00.29

L25        2744 SEA SSS FUL L17

=> file hcaplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                            1264.62    1264.83

FILE 'HCAPLUS' ENTERED AT 12:21:31 ON 31 JAN 2008
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COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 31 Jan 2008 VOL 148 ISS 5
FILE LAST UPDATED: 30 Jan 2008 (20080130/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s l25
L26        1702 L25

=> s l26 and pd < february 1999
      19911764 PD < FEBRUARY 1999
                 (PD<19990200)
L27         595 L26 AND PD < FEBRUARY 1999

=> s l27 and matsuoka, h?/au
           2662 MATSUOKA, H?/AU
L28           0 L27 AND MATSUOKA, H?/AU

=> s l27 and sato, t?/au
          24965 SATO, T?/AU
L29           3 L27 AND SATO, T?/AU

=> d l29, ibib abs hitstr, 1-3

L29  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:          1990:196672  HCAPLUS
DOCUMENT NUMBER:           112:196672
TITLE:                     Neutrophil-activating factors and its manufacture with
                           serum-independent human cells
INVENTOR(S):               Shionoya, Hiroshi; Koyanagi, Nozomi; Sato,
                           Toshitaka; Kuwata, Manabu; Koide, Jun; Miyoshi,
                           Isao
PATENT ASSIGNEE(S):        Eisai Co., Ltd., Japan
SOURCE:                    Jpn. Kokai Tokkyo Koho, 11 pp.
                           CODEN: JKXXAF
DOCUMENT TYPE:             Patent
LANGUAGE:                  Japanese
FAMILY ACC. NUM. COUNT:    1
PATENT INFORMATION:

     PATENT NO.            KIND   DATE        APPLICATION NO.          DATE
     ---------------       ----   --------    --------------------     --------
     JP 01161000            A     19890623    JP 1987-318328           19871216 <--
PRIORITY APPLN. INFO.:                         JP 1987-318328           19871216
```

AB Antitumor and antibacterial neutrophil-activating factor (NAS) having a mol. weight of 25,000 and a partially defined amino acid sequence is manufactured by cultivating serum-independent strain A-6 of cell line MT-2 that is established from human umbilical leukocytes. Thus, strain A-6 isolated from cell line MT-2 was cultivated in the serum-free RPMI-1640 medium. The medium was subsequently condensed, chromatographed, gel-filtered in presence of 6 M urea, and purified by the reverse-phased HPLC to obtain NAS. The effect of NAS on antitumor activity of neutrophiles against mast cell tumor P815 was demonstrated.

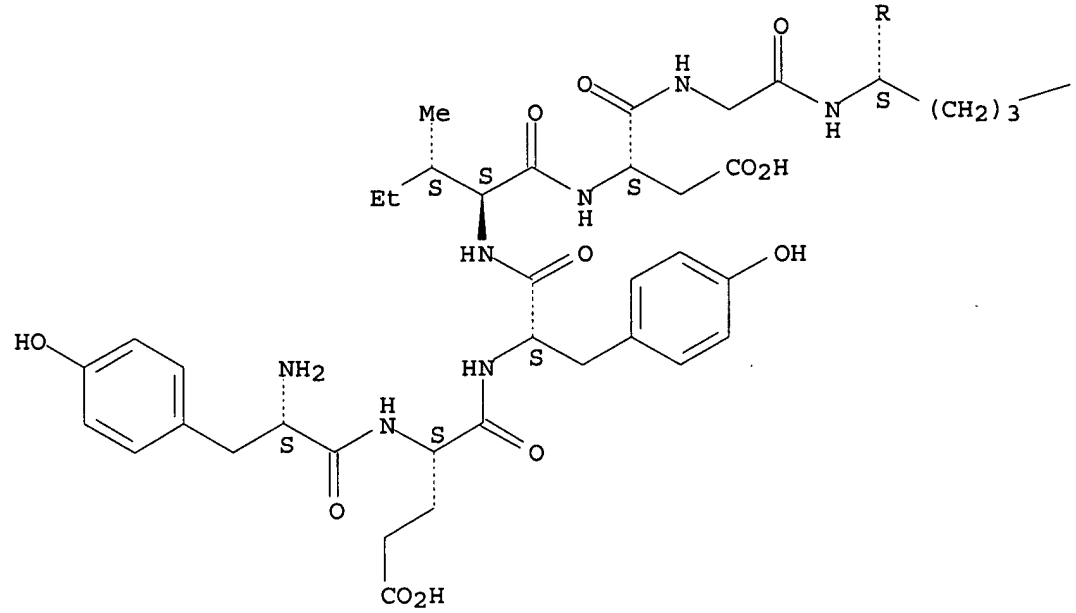
Updated Search

09890219

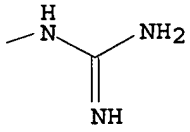
IT 126738-60-1
RL: BIOL (Biological study)
(amino acid sequence in neutrophil-activating factor)
RN 126738-60-1 HCAPLUS
CN L-Serine, N-[N2-[N-[N-[N-[N-(N-L-tyrosyl-L-α-glutamyl)-L-tyrosyl]-L-isoleucyl]-L-α-aspartyl]glycyl]-L-arginyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

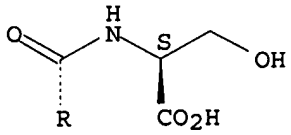
PAGE 1-A



PAGE 1-B



PAGE 2-A



L29 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:34327 HCAPLUS

Updated Search

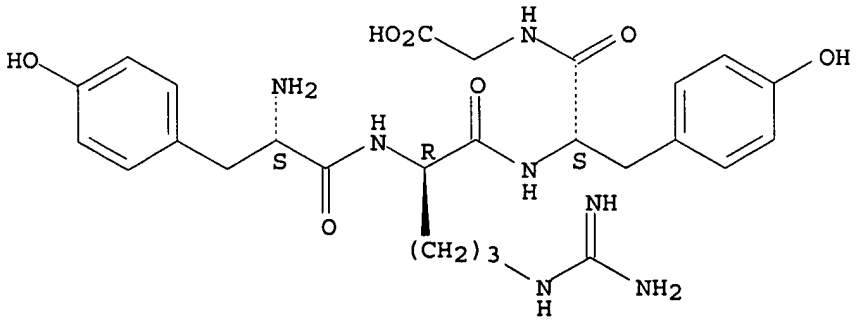
09890219

DOCUMENT NUMBER: 104:34327
ORIGINAL REFERENCE NO.: 104:5652h,5653a
TITLE: Studies on analgesic oligopeptides. III. Synthesis and analgesic activity after subcutaneous administration of [D-Arg2]dermorphin and its N-terminal tetrapeptide analogs
AUTHOR(S): Sasaki, Yusuke; Matsui, Michiko; Fujita, Hiroki; Hosono, Masahiro; Taguchi, Masumi; Suzuki, Kenji; Sakurada, Shinobu; Sato, Takumi; Sakurada, Tsukasa; Kisara, Kensuke
CORPORATE SOURCE: Tohoku Coll. Pharm., Sendai, 983, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1985), 33(4), 1528-36
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 104:34327

AB [D-Arg2]dermorphin (H-Tyr-D-Arg-Phe-Gly-Tyr-Pro-Ser-NH2) and 19 N-terminal tetrapeptide analogs, e.g., H-Tyr-D-Arg-Phe-Gly-OH (I), were prepared by the conventional solution method and their analgesic activities after s.c. administration to mice were assessed by the tail-pressure test. [D-Arg2]dermorphin had analgesic potency equal to or slightly greater than that of dermorphin. I showed a potency 4.8 times that of morphine and comparable with that of dermorphin on a molar basis. Several analogs in which Gly4 was replaced by sarcosine or D-Ala exhibited activity greater than that of I. Replacement of Gly4 by Pro, Leu, or D-leu resulted in a marked decrease in potency, and replacement of either Phe3 by other aromatic amino acids or D-Arg2 by other basic D-amino acids gave analogs with greatly decreased activities. However, one analog whose guanidino functionality on D-Arg2 was blocked by a nitro group, showed activity one-third that of the parent peptide I. The structure-activity relationship for the tetrapeptide is discussed.

IT 96425-89-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and analgesic activity of)
RN 96425-89-7 HCAPLUS
CN Glycine, N-[N-(N2-L-tyrosyl-D-arginyl)-L-tyrosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 99592-88-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 99592-88-8 HCAPLUS

Updated Search

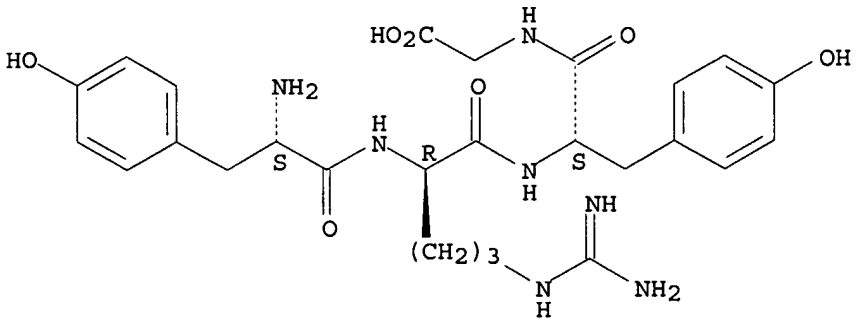
09890219

CN Glycine, N-[N-(N2-L-tyrosyl-D-arginyl)-L-tyrosyl]-, diacetate (salt) (9CI) (CA INDEX NAME)

CM 1

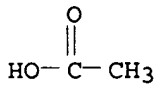
CRN 96425-89-7
CMF C26 H35 N7 O7

Absolute stereochemistry.



CM 2

CRN 64-19-7
CMF C2 H4 O2



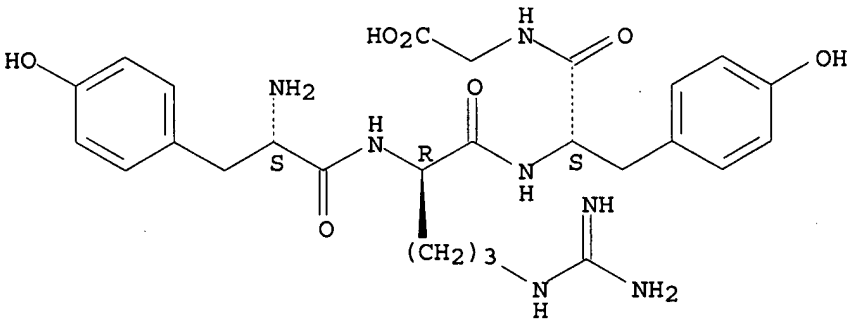
L29 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:198185 HCAPLUS
DOCUMENT NUMBER: 102:198185
ORIGINAL REFERENCE NO.: 102:30939a,30942a
TITLE: The analgesic activity of D-Arg2-dermorphin and its N-terminal tetrapeptide analogs after subcutaneous administration in mice
AUTHOR(S): Sasaki, Y.; Matsui, M.; Fujita, H.; Hosono, M.; Taguchi, M.; Suzuki, K.; Sakurada, S.; Sato, T.; Sakurada, T.; Kisara, K.
CORPORATE SOURCE: Tohoku Coll. Pharm., Sendai, 983, Japan
SOURCE: Neuropeptides (Edinburgh, United Kingdom) (1985), 5(4-6), 391-4
CODEN: NRPPDD; ISSN: 0143-4179
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 2-D-Arginine-dermorphin (I) [96425-96-6] and 19 N-terminal tetrapeptide analogs were prepared, and their analgesic activities were determined by the tail pressure test after s.c. administration in mice. The stability of a tetrapeptide I analog to enzymic degradation was also examined I had analgesic potency equal to or slightly greater than that of dermorphin. In a series of tetrapeptide I analogs, a very pronounced activity greater than that of

Updated Search

morphine was observed for analogs of the following structure, H-Tyr-D-Arg-Phe-X-OH (X = Gly, sarcosine, and D-Ala) and their esters. Replacement of the 2-D-arginine residue by D-nitroarginine, D-homoarginine, or D-lysine decreased the potency, suggesting that the guanidino group and side chain length of D-arginine are of great importance for a higher activity. The tetrapeptide H-Tyr-D-Arg-Phe-Gly-OH was more stable than the parent tetrapeptide (H-Tyr-D-Ala-Phe-Gly-OH) to cleavage by aminopeptidase M [9054-63-1] and carboxypeptidase Y [9046-67-7].

IT 96425-89-7
RL: BIOL (Biological study)
(analgesia from, mol. structure in relation to)
RN 96425-89-7 HCAPLUS
CN Glycine, N-[N-(N2-L-tyrosyl-D-arginyl)-L-tyrosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d his

(FILE 'HOME' ENTERED AT 11:56:28 ON 31 JAN 2008)

FILE 'REGISTRY' ENTERED AT 11:56:34 ON 31 JAN 2008

L1		STRUCTURE UPLOADED
L2	0	S L1
L3	0	S L1 FULL
L4		STRUCTURE UPLOADED
L5	0	S L4
L6	0	S L4 FULL
L7		STRUCTURE UPLOADED
L8	0	S L7
L9	0	S L7 FULL
L10		STRUCTURE UPLOADED
L11	0	S L10
L12	0	S L10 FULL
L13		STRUCTURE UPLOADED
L14	50	S L13
L15		STRUCTURE UPLOADED
L16	6	S L15
L17		STRUCTURE UPLOADED
L18	9	S L17
L19		STRUCTURE UPLOADED
L20	0	S L19
L21	0	S L19 FULL
L22		STRUCTURE UPLOADED

Updated Search

09890219

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L23             0 S L22
L24             0 S L22 FULL
L25          2744 S L18 FULL

     FILE 'HCAPLUS' ENTERED AT 12:21:31 ON 31 JAN 2008
L26          1702 S L25
L27           595 S L26 AND PD < FEBRUARY 1999
L28             0 S L27 AND MATSUOKA, H?/AU
L29             3 S L27 AND SATO, T?/AU

=> s l27 not l29
L30           592 L27 NOT L29

=> s l30 and takahashi, t?/au
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=> s l26 not l27
L35          1107 L26 NOT L27

=> s l35 and matsuoka, h?/au
          2662 MATSUOKA, H?/AU
L36             2 L35 AND MATSUOKA, H?/AU

=> d l36, ibib abs fhitstr, 1-2

L36  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2000:535162  HCAPLUS
DOCUMENT NUMBER:          133:150920
TITLE:                    Preparation of peptides or analogs containing
                          substituted phenethylamine moiety as motilin receptor
                          antagonists
INVENTOR(S):              Matsuoka, Hiroharu; Sato, Tsutomu;
                          Takahashi, Tadakatsu; Kim, Dong Ick; Jung, Kyung Yun;
                          Park, Chan Hee
PATENT ASSIGNEE(S):       Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE:                   PCT Int. Appl., 403 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2000044770         A1    20000803    WO 2000-JP444           20000128
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
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Updated Search

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MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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EP 1149843	A1	20011031	EP 2000-901956	20000128
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HU 2001005204	A3	20020528		
JP 3715202	B2	20051109	JP 2000-596026	20000128
NO 2001003684	A	20010928	NO 2001-3684	20010726
PRIORITY APPLN. INFO.:			JP 1999-20523	A 19990128
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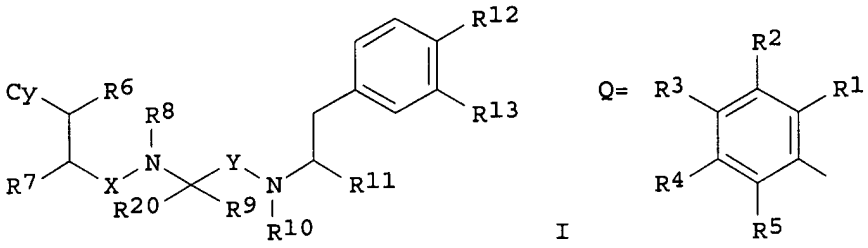
OTHER SOURCE(S): MARPAT 133:150920
GI



I

AB Substituted phenethylamine derivs. represented by general formula (I), hydrates of the same, or pharmaceutically acceptable salts thereof [wherein Cy is a group represented by general formula Q, an optionally substituted heterocyclic group, C3-7 cycloalkyl, or phenyl; R1, R1, R1, R1 and R5 are each hydrogen, halogeno, hydroxyl, amino, trifluoromethyl or cyano, at least one of R1-R5 being halogeno, trifluoromethyl or cyano; R6 represents hydrogen, (un)substituted linear or branched C1-3 alkyl, amino, or hydroxy; R8 represents hydrogen, Me, or ethyl; R9 represents (un)substituted linear or branched C1-6 alkyl, C2-6 alkenyl, or C2-6 alkynyl, C3-7 cycloalkyl, or (un)substituted Ph; R20 represents hydrogen, or (un)substituted linear or branched C1-3 alkyl or R9 and R20 together forms C3-7 cycloalkyl; R10 represents hydrogen, (un)substituted linear or branched C1-3 alkyl; R11 represents hydrogen or (un)substituted linear or branched C1-3 alkyl, (un)substituted carbamoyl, or carboxy; R12 represents hydroxy or linear or branched C1-4 alkoxy; R13 represents hydrogen, (un)substituted linear or branched C1-6 alkyl, C2-6 alkenyl, or alkynyl, etc.; X, Y represents carbonyl or CH2; provisos are given.], which exhibit motilin receptor antagonism and being useful as drugs for preventing digestive tract movement or high level of blood motilin. Thus, 3-methyl-2-methylaminobutyric acid 2-(3-tert-butyl-4-hydroxyphenyl)-1-(2-pyridylcarbamoyl)ethylamide (preparation given) was condensed with Boc-Phe(4-F)-OH using CMPI in the presence of Et3N in THF under ice-cooling for 4 h followed by treatment of the product with CF3CO2H in

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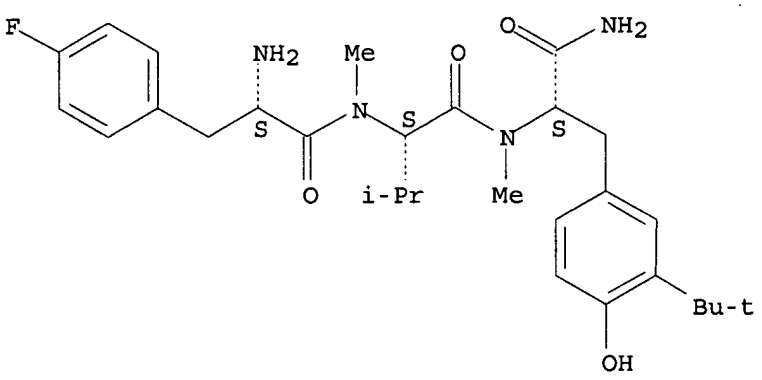
CH2Cl2 gave 2-((2-amino-3-(4-fluorophenyl)propanoyl)-N-methylamino)-3-methylbutyric acid 2-(3-tert-butyl-4-hydroxyphenyl)-1-(2-pyridylcarbamoyl)ethylamide (II). II and N-Et-Phe(4-F)-N-Me-Val-N-Et-Tyr(3-tBu)-NHEt showed IC50 of 0.35 and 0.17 nM, resp., for inhibiting binding of 125I-motilin to motilin receptor preparation from mucous membrane of rabbit duodenum.

IT 287205-81-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptides or analogs containing substituted phenethylamine moiety
as motilin receptor antagonists and drugs for preventing digestive tract movement or high level of blood motilin)

RN 287205-81-6 HCAPLUS
CN L-Tyrosinamide, 4-fluoro-L-phenylalanyl-N-methyl-L-valyl-3-(1,1-dimethylethyl)-Nα-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:210207 HCAPLUS
DOCUMENT NUMBER: 132:251427
TITLE: Preparation of peptide derivatives as motilin receptor antagonists
INVENTOR(S): Matsuoka, Hiroharu; Sato, Tsutomu
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000017231	A1	20000330	WO 1999-JP5215	19990924

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Updated Search

SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

TW 509699	B	20021111	TW 1999-88116326	19990922
AU 9957592	A1	20000410	AU 1999-57592	19990924
EP 1116726	A1	20010718	EP 1999-944808	19990924
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JP 3519367	B2	20040412	JP 2000-574139	19990924
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PRIORITY APPLN. INFO.:	JP 1998-307784	A 19980924
	WO 1999-JP5215	W 19990924
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OTHER SOURCE(S): MARPAT 132:251427

AB H-Phe-Val-substituted Ala-derivs. represented by general formula R3CH(CHR1R2)-X-NR4CH(R5)-Y-NR6CH(CH2R8)R7 [R1 = (un)substituted Ph, heterocyclyl, C2-6 linear or branched alkenyl or alkynyl; R2 = H, (un)substituted C1-3 linear or branched alkyl alkyl, NH2, OH; R3 = H, (un)substituted C1-3 linear or branched alkyl, (un)substituted NH2, OH; R4 = H, Me, Et; R5 = (un)substituted C1-6 linear or branched alkyl, C3-7 cycloalkyl, (un)substituted Ph; R6 = H, Me, Et; R7 = H, (un)substituted C1-3 linear or branched alkyl, (un)substituted CONH2; R8 = (un)substituted C3-9 heterocyclyl, (un)substituted Ph], hydrates, or pharmaceutically acceptable salts thereof are prepared Drugs containing these compds. as the active ingredient for motilin receptor antagonists, inhibiting movement of digestive tracts, or treating high level of motilin in blood are also claimed. These peptides are useful for the treatment of irritable bowel syndrome. Thus, Me-Val-Phe(3-tert-butyl-4-F)-NH2 (preparation given) was condensed with Boc-Phe-OH using BOP and diisopropylethylamine in CH2Cl2 at room temperature for 22 h, followed by the treatment with CF3CO2H, to give H-Phe-N-Me-Val-Phe(3-tert-butyl-4-F)-NH2 (I). I showed IC50 of 3.5 nM for inhibiting the binding of [125I]motilin to viscous membrane preparation from rabbit ileum.

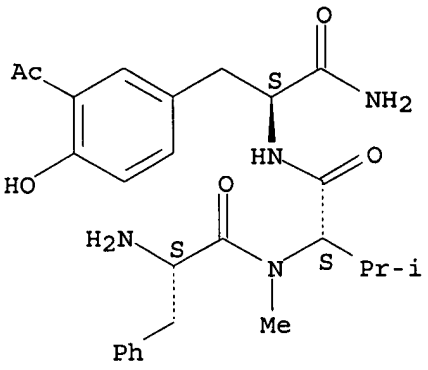
IT 262360-77-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptide derivs. as motilin receptor antagonists and inhibitors of digestive tract motility)

RN 262360-77-0 HCAPLUS

CN L-Tyrosinamide, L-phenylalanyl-N-methyl-L-valyl-3-acetyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

09890219



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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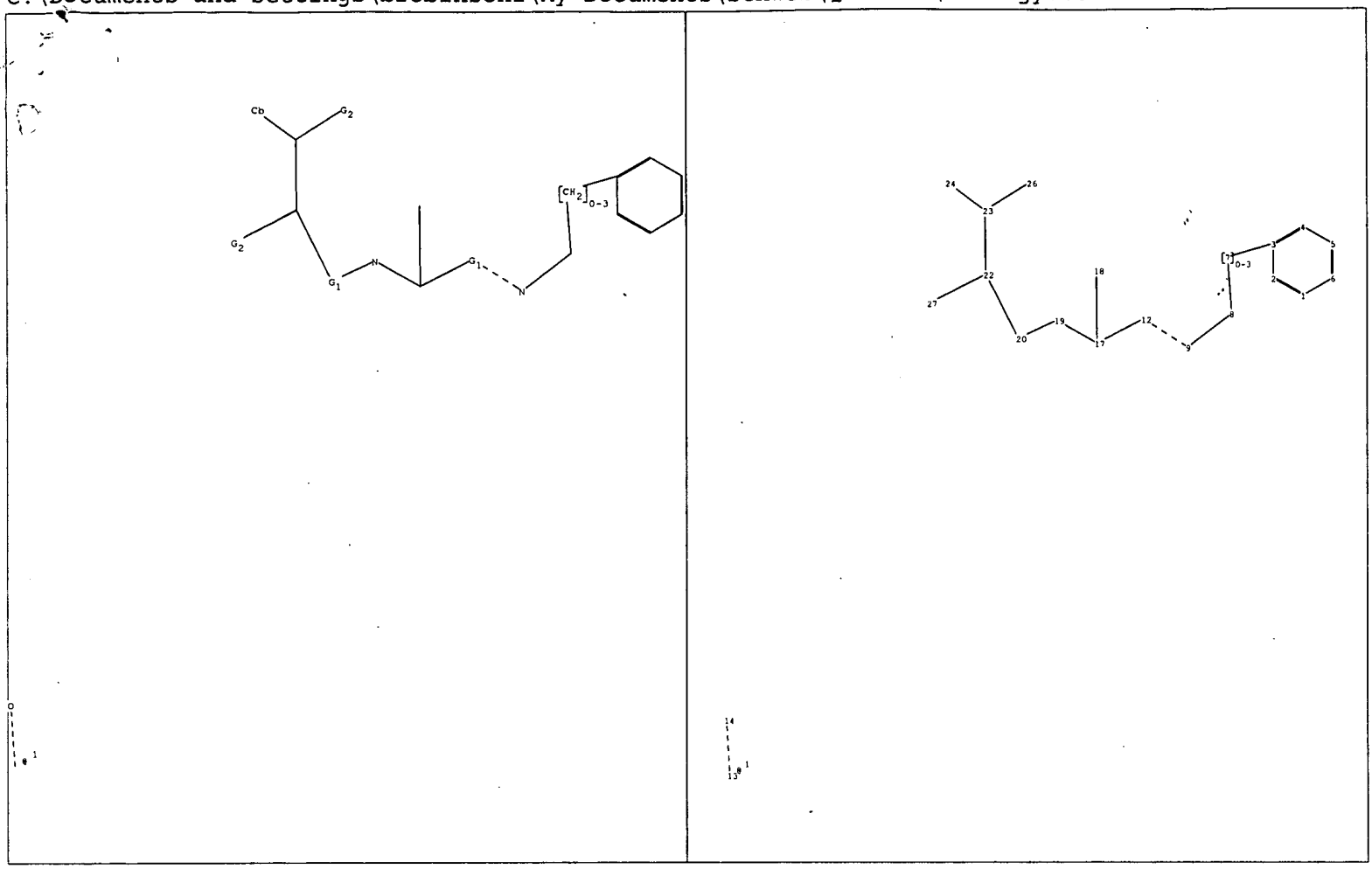

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ring nodes :
1 2 3 4 5 6
ring/chain nodes :
17 18
chain bonds :
3-7 7-8 8-9 9-12 12-17 13-14 17-19 19-20 20-22 22-23 22-27 23-24 23-26
ring/chain bonds :
17-18
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
8-9 9-12 12-17 13-14 17-18 17-19 19-20 20-22 22-27 23-26
exact bonds :
3-7 7-8 22-23 23-24
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2,[*1]

G2:H,Ak,OH,NH2

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 12:CLASS
13:CLASS 14:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 22:CLASS 23:CLASS 24:Atom
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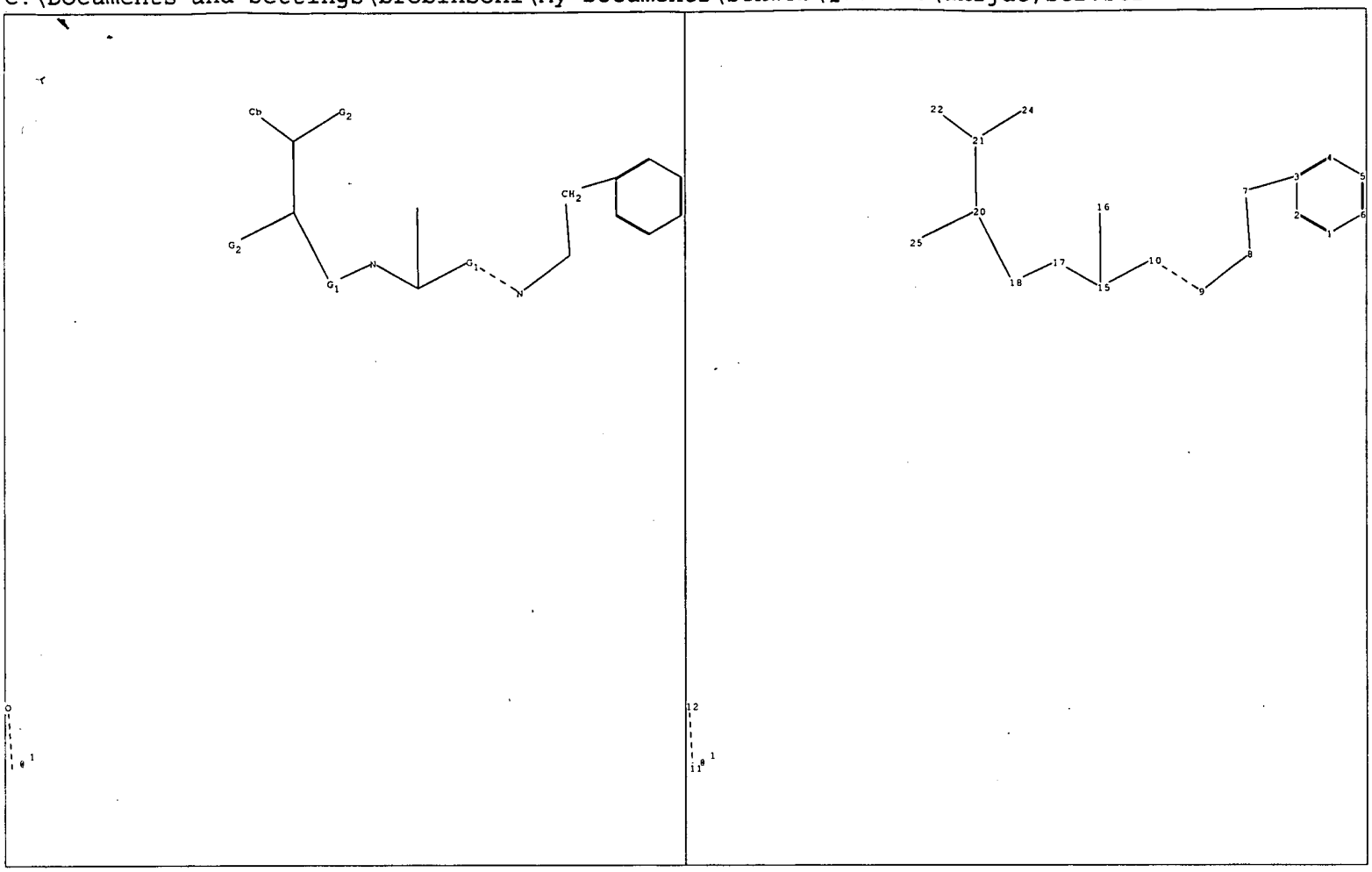

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ring nodes :
1 2 3 4 5 6
ring/chain nodes :
15 16
chain bonds :
3-7 7-8 8-9 9-10 10-15 11-12 15-17 17-18 18-20 20-21 20-25 21-22 21-24
ring/chain bonds :
15-16
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
8-9 9-10 10-15 11-12 15-16 15-17 17-18 18-20 20-25 21-24
exact bonds :
3-7 7-8 20-21 21-22
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2,[*1]

G2:H,Ak,OH,NH2

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 20:CLASS 21:CLASS 22:Atom
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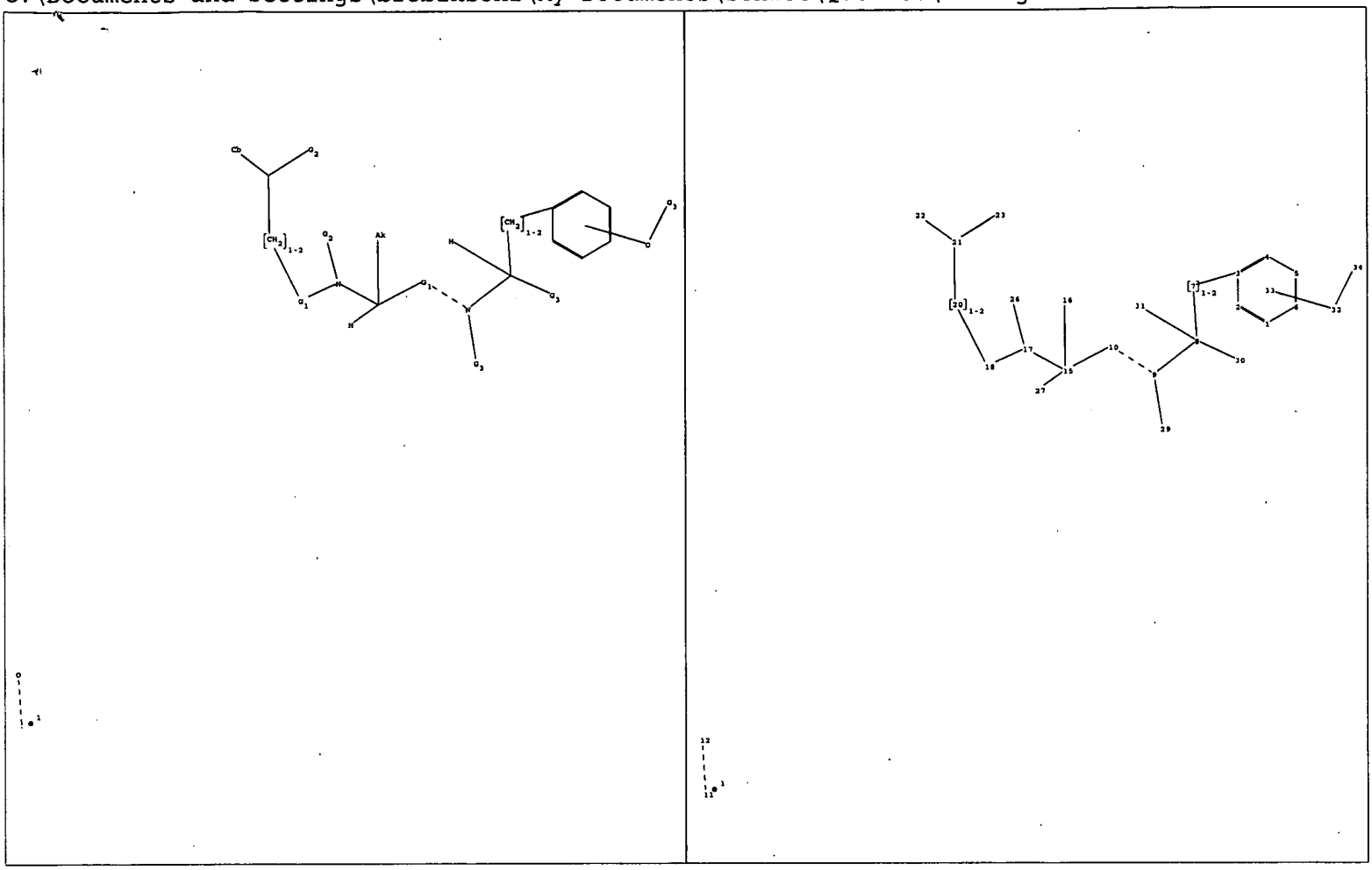

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ring nodes :
1 2 3 4 5 6
ring/chain nodes :
15
chain bonds :
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20-21 21-22 21-23 32-34
ring/chain bonds :
15-16
ring bonds :
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exact/norm bonds :
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exact bonds :
3-7 7-8 8-31 15-27 20-21 21-22
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2,[*1]

G2:H,CH3,Et

G3:H,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 20:CLASS 21:CLASS 22:Atom
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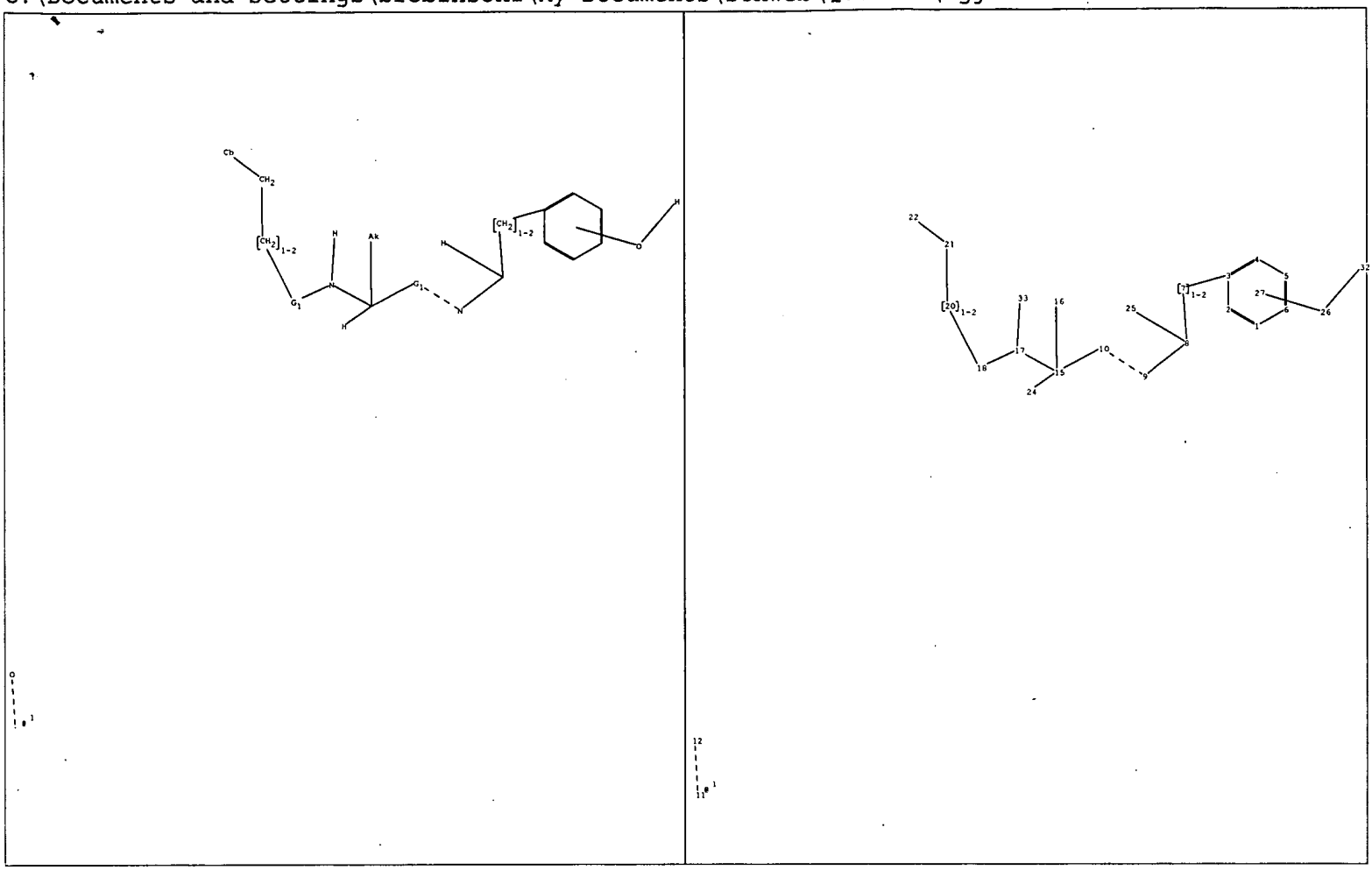

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ring nodes :
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ring/chain nodes :
15
chain bonds :
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26-32
ring/chain bonds :
15-16
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
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exact bonds :
3-7 7-8 8-25 15-24 17-33 20-21 21-22 26-32
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2,[*1]

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
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12:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 20:CLASS 21:CLASS 22:Atom
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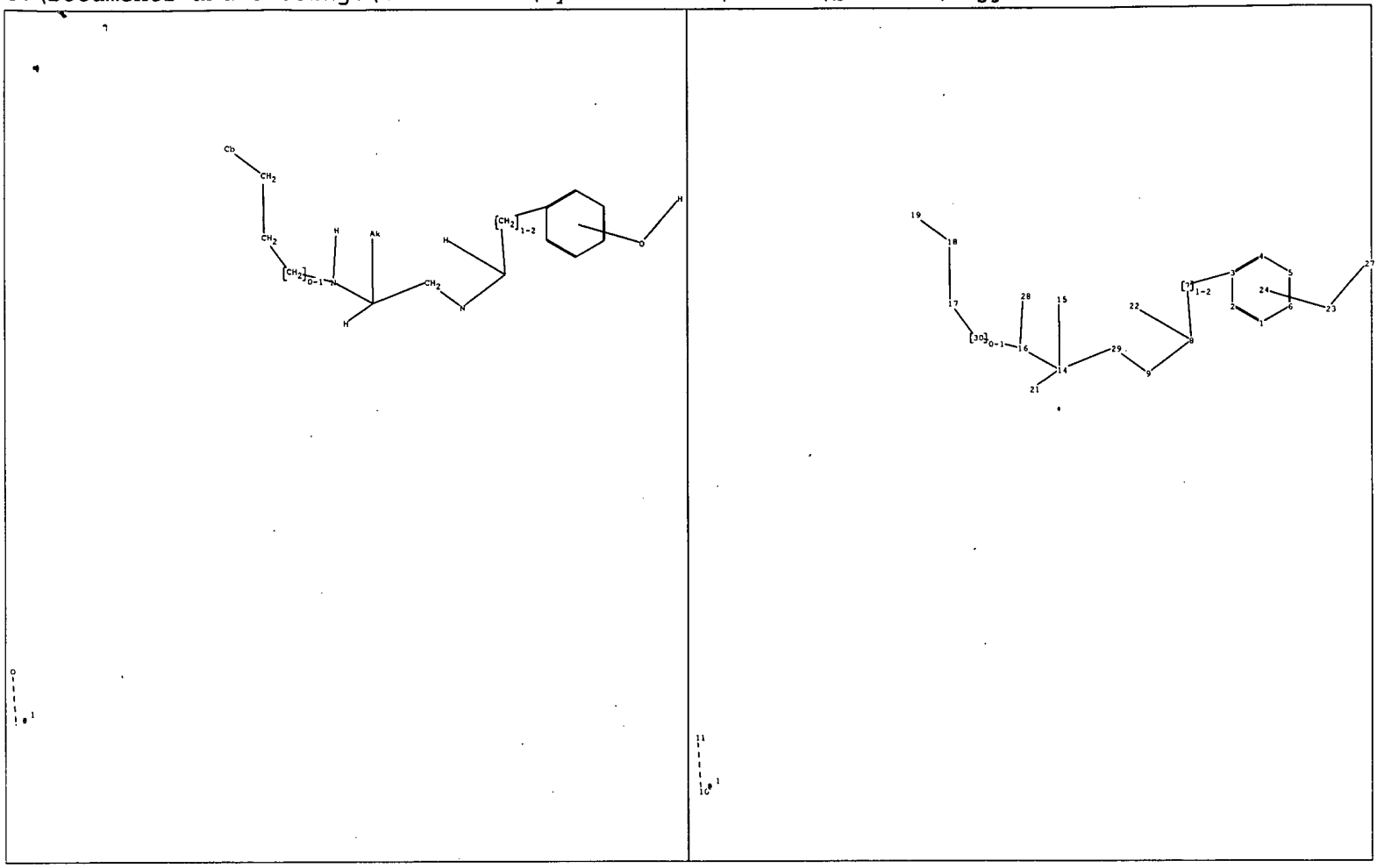

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ring/chain nodes :
14
chain bonds :
3-7 7-8 8-9 8-22 9-29 10-11 14-21 14-16 14-29 16-28 16-30 17-18 17-30 18-19
23-27
ring/chain bonds :
14-15
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
8-9 10-11 14-15 14-16
exact bonds :
3-7 7-8 8-22 9-29 14-21 14-29 16-28 16-30 17-18 17-30 18-19 23-27
normalized bonds :
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isolated ring systems :
containing 1 :

G1:CH2,[*1]

Match level :
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11:CLASS

14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:Atom 21:CLASS 22:CLASS
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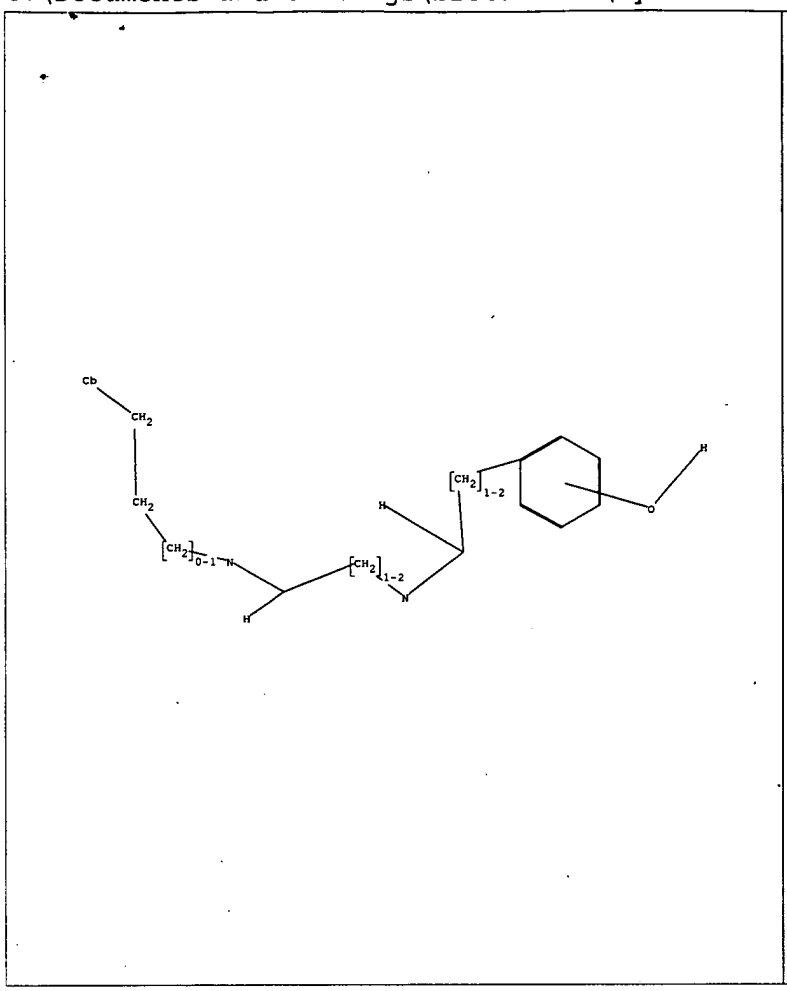

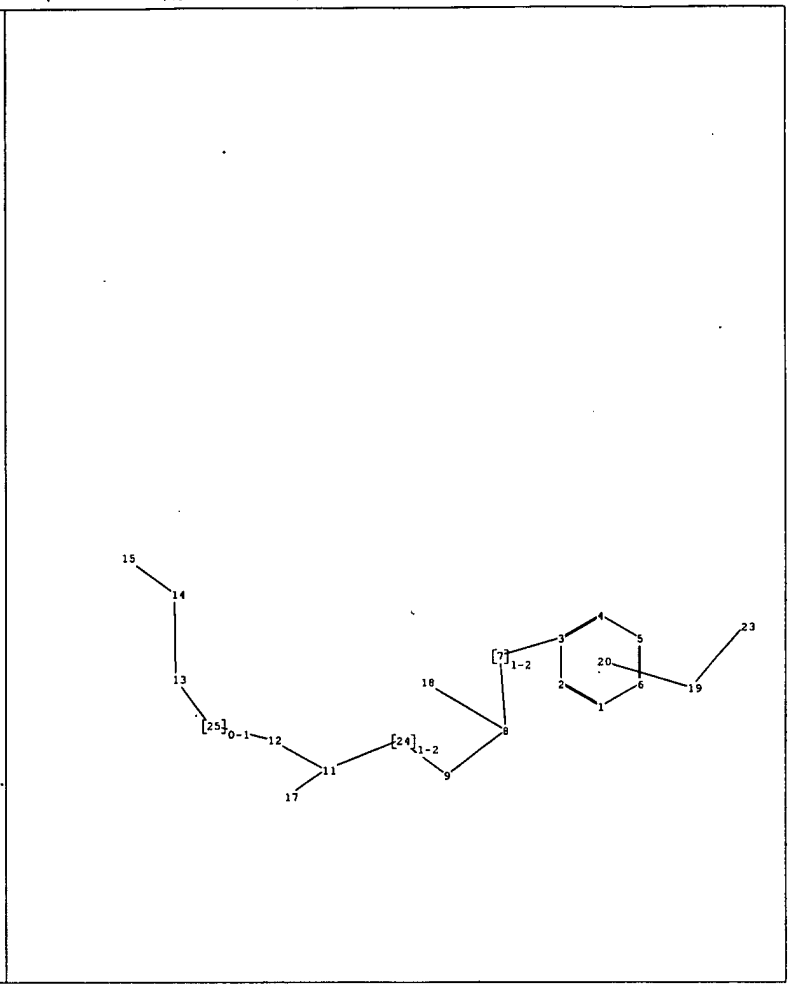

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ring nodes :
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ring/chain nodes :
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ring bonds :
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exact/norm bonds :
8-9 11-12
exact bonds :
3-7 7-8 8-18 9-24 11-17 11-24 12-25 13-14 13-25 14-15 19-23
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2

Match level :
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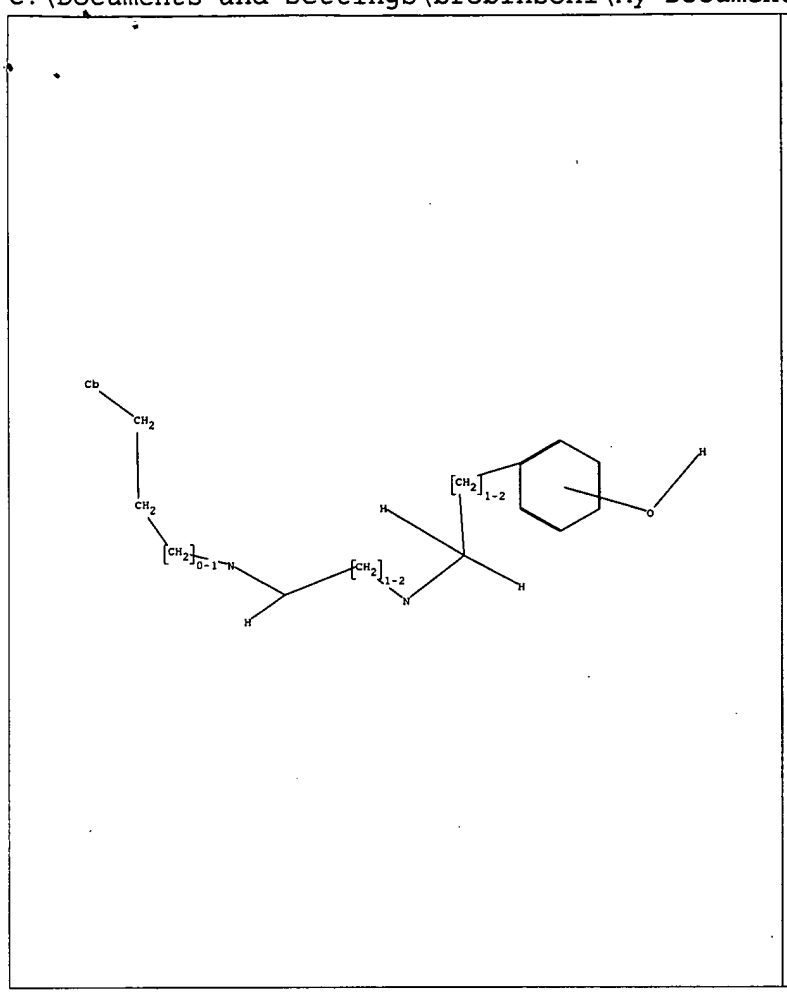

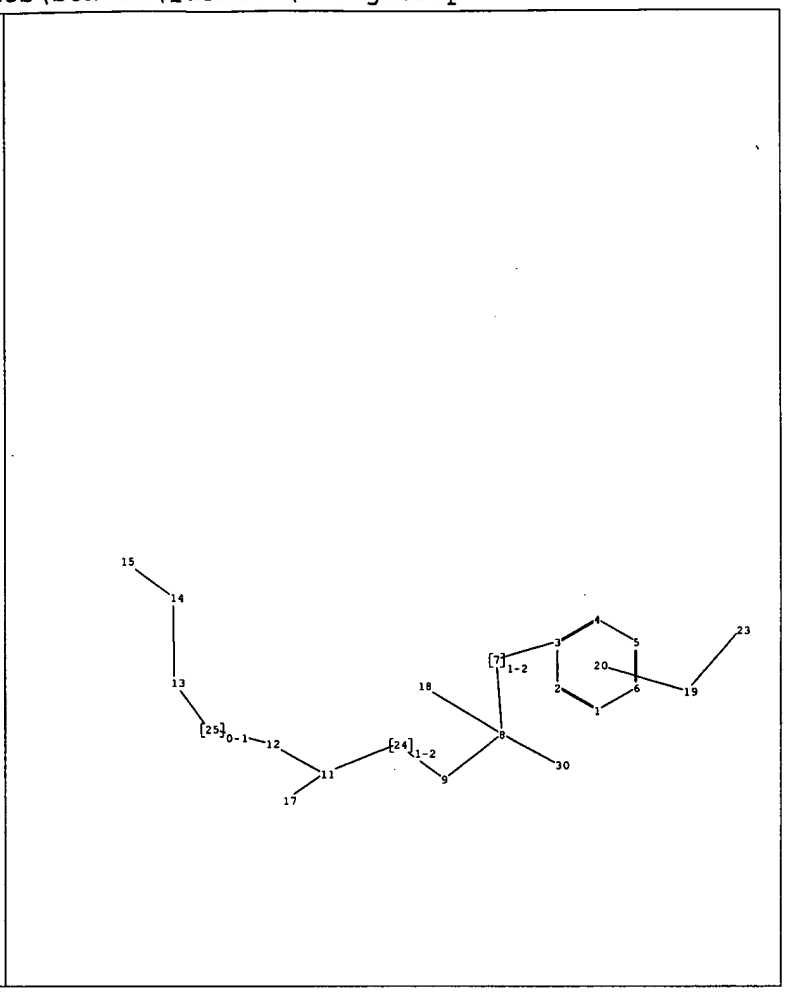

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ring/chain nodes :
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8-9 11-12
exact bonds :
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normalized bonds :
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isolated ring systems :
containing 1 :

G1:CH2

Match level :
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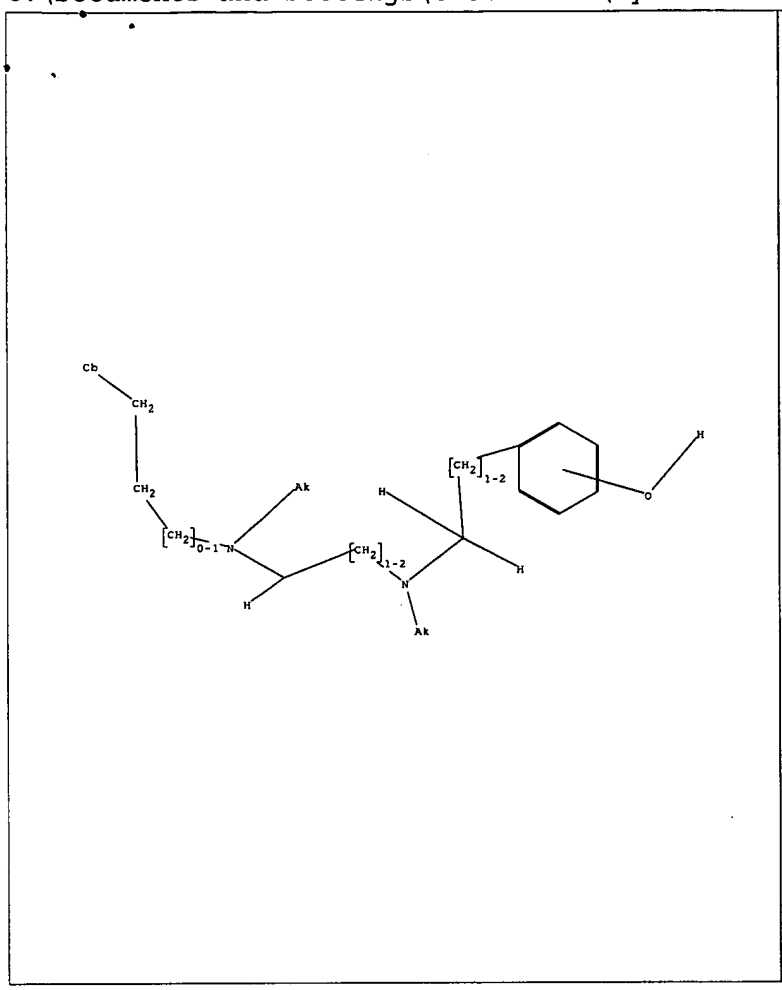

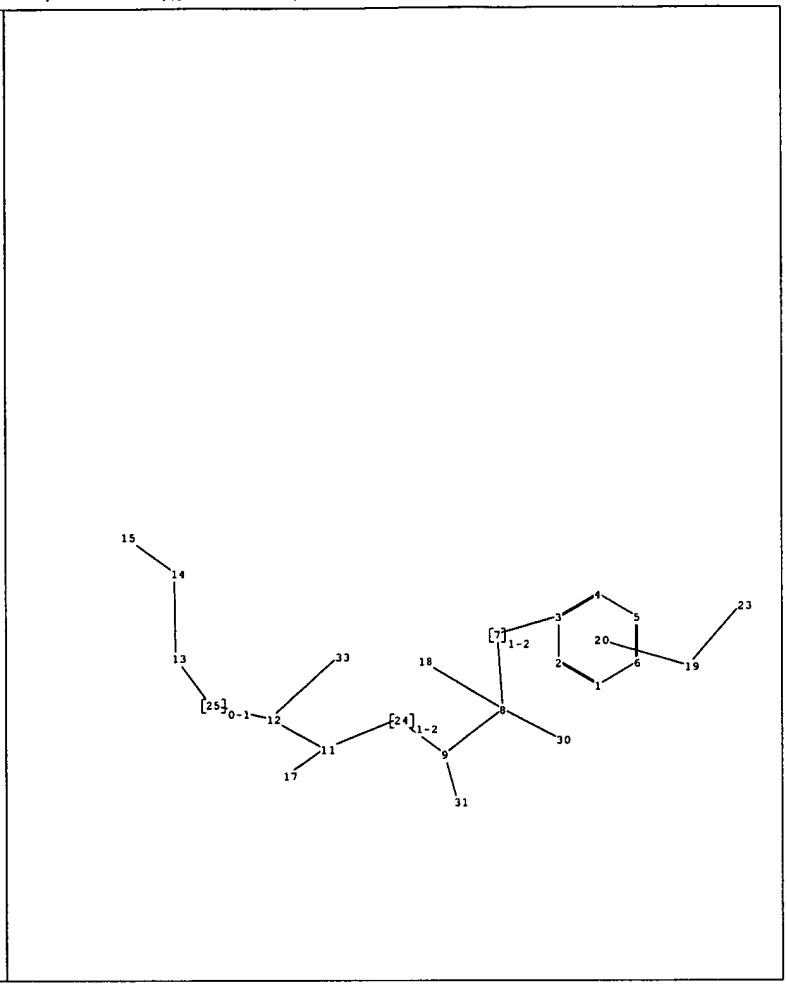

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ring nodes :
1 2 3 4 5 6
ring/chain nodes :
11
chain bonds :
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14-15 19-23
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
8-9 9-31 11-12 12-33
exact bonds :
3-7 7-8 8-18 8-30 9-24 11-17 11-24 12-25 13-14 13-25 14-15 19-23
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2

Connectivity :
31:1 E exact RC ring/chain 33:1 E exact RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 11:CLASS
12:CLASS

```
;          13:CLASS  14:CLASS  15:Atom  17:CLASS  18:CLASS  19:CLASS  20:Atom  23:CLASS
24:CLASS  25:CLASS  30:CLASS  31:CLASS  33:CLASS
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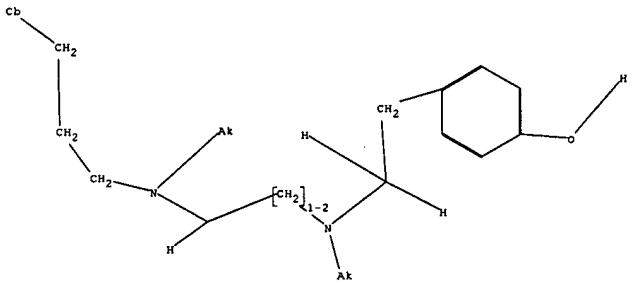

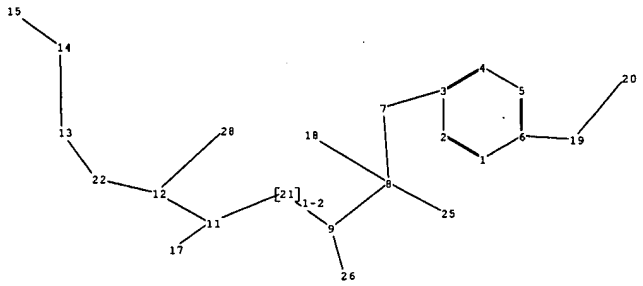

chain nodes :
7 8 9 12 13 14 15 17 18 19 20 21 22 25 26 28
ring nodes :
1 2 3 4 5 6
ring/chain nodes :
11
chain bonds :
3-7 6-19 7-8 8-9 8-18 8-25 9-21 9-26 11-17 11-21 11-12 12-22 12-28 13-14
13-22 14-15 19-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
6-19 8-9 9-26 11-12 12-28
exact bonds :
3-7 7-8 8-18 8-25 9-21 11-17 11-21 12-22 13-14 13-22 14-15 19-20
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2

Connectivity :
26:1 E exact RC ring/chain 28:1 E exact RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 11:CLASS
12:CLASS

13:CLASS 14:CLASS 15:Atom 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 25:CLASS 26:CLASS 28:CLASS

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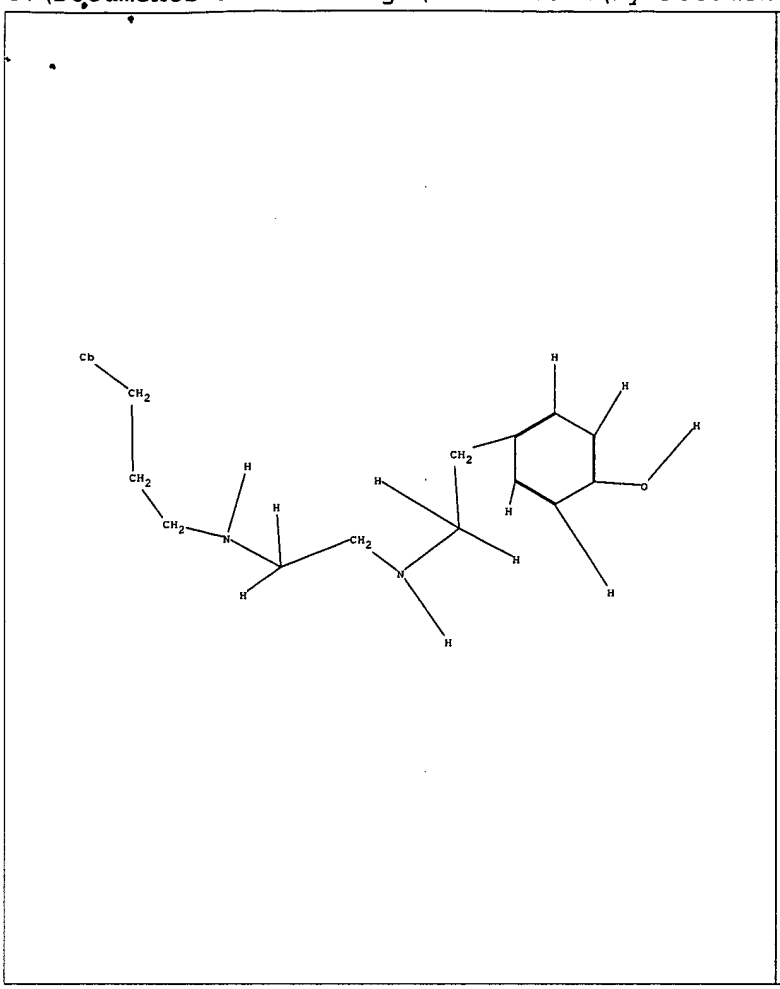

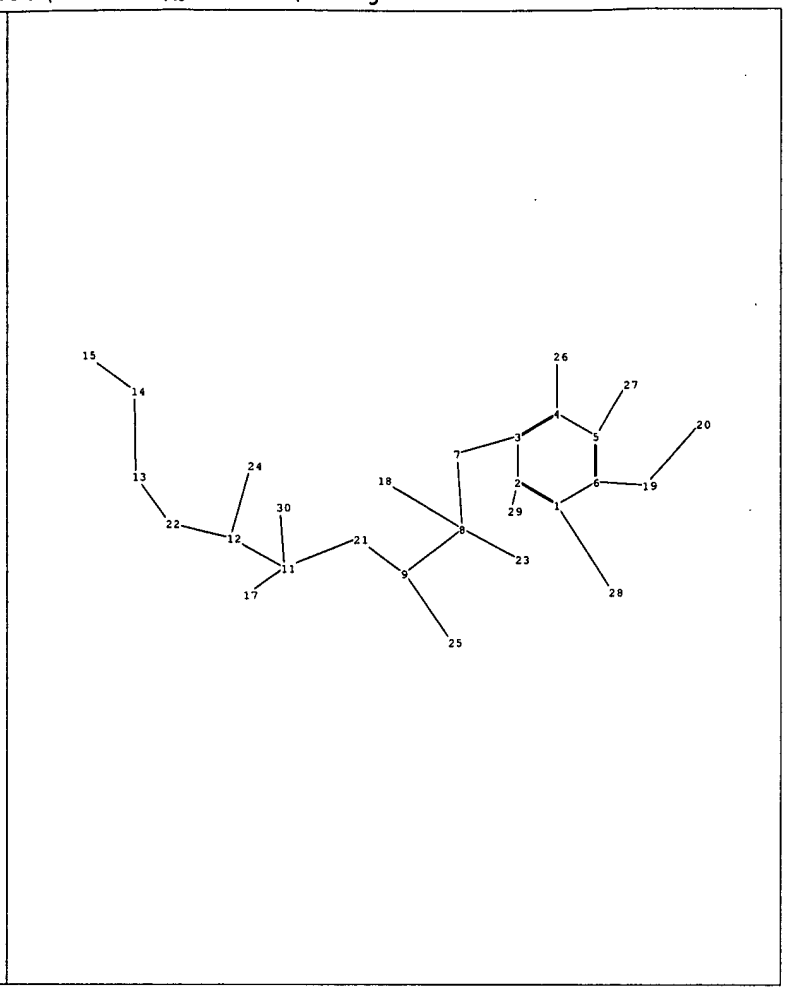

chain nodes :
7 8 9 12 13 14 15 17 18 19 20 21 22 23 24 25 26 27 28 29 30
ring nodes :
1 2 3 4 5 6
ring/chain nodes :
11
chain bonds :
1-28 2-29 3-7 4-26 5-27 6-19 7-8 8-9 8-18 8-23 9-21 9-25 11-17 11-21 11-12
11-30 12-22 12-24 13-14 13-22 14-15 19-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
6-19 8-9 11-12
exact bonds :
1-28 2-29 3-7 4-26 5-27 7-8 8-18 8-23 9-21 9-25 11-17 11-21 11-30 12-22
12-24 13-14 13-22 14-15 19-20
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2

Connectivity :
15:1 E exact RC ring/chain
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:Atom 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS

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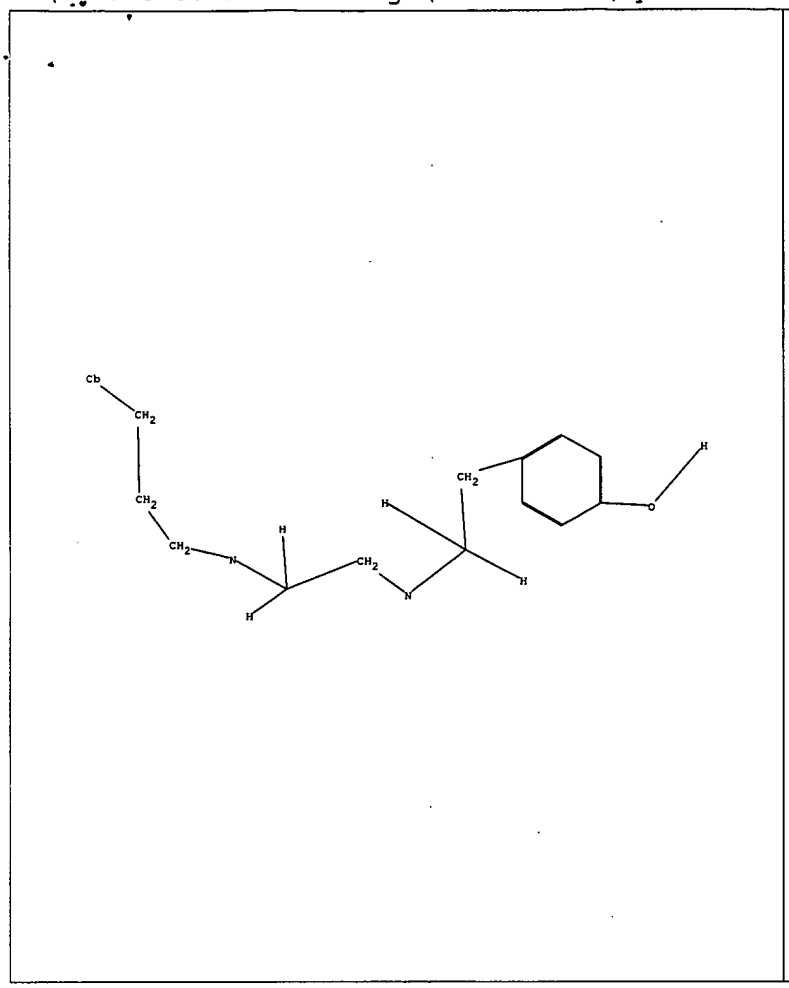

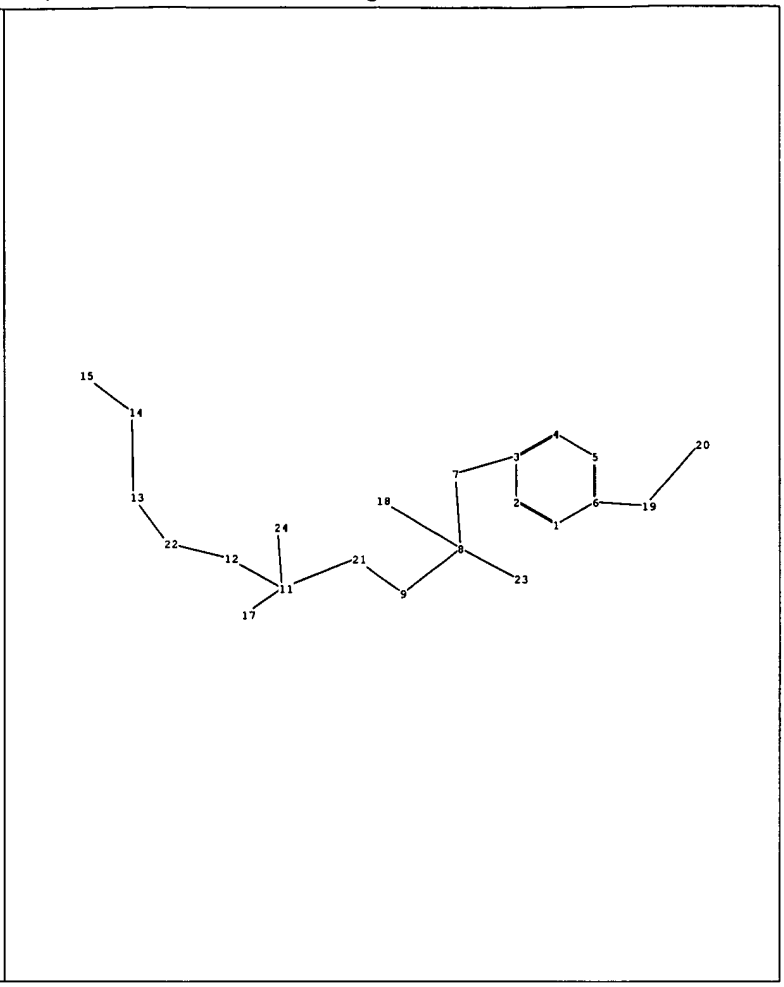

chain nodes :
7 8 9 12 13 14 15 17 18 19 20 21 22 23 24
ring nodes :
1 2 3 4 5 6
ring/chain nodes :
11
chain bonds :
3-7 6-19 7-8 8-9 8-18 8-23 9-21 11-17 11-21 11-12 11-24 12-22 13-14 13-22
14-15 19-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
6-19 8-9 11-12
exact bonds :
3-7 7-8 8-18 8-23 9-21 11-17 11-21 11-24 12-22 13-14 13-22 14-15 19-20
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2

Connectivity :
15:1 E exact RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 11:CLASS
12:CLASS

13:CLASS 14:CLASS 15:Atom 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:CLASS

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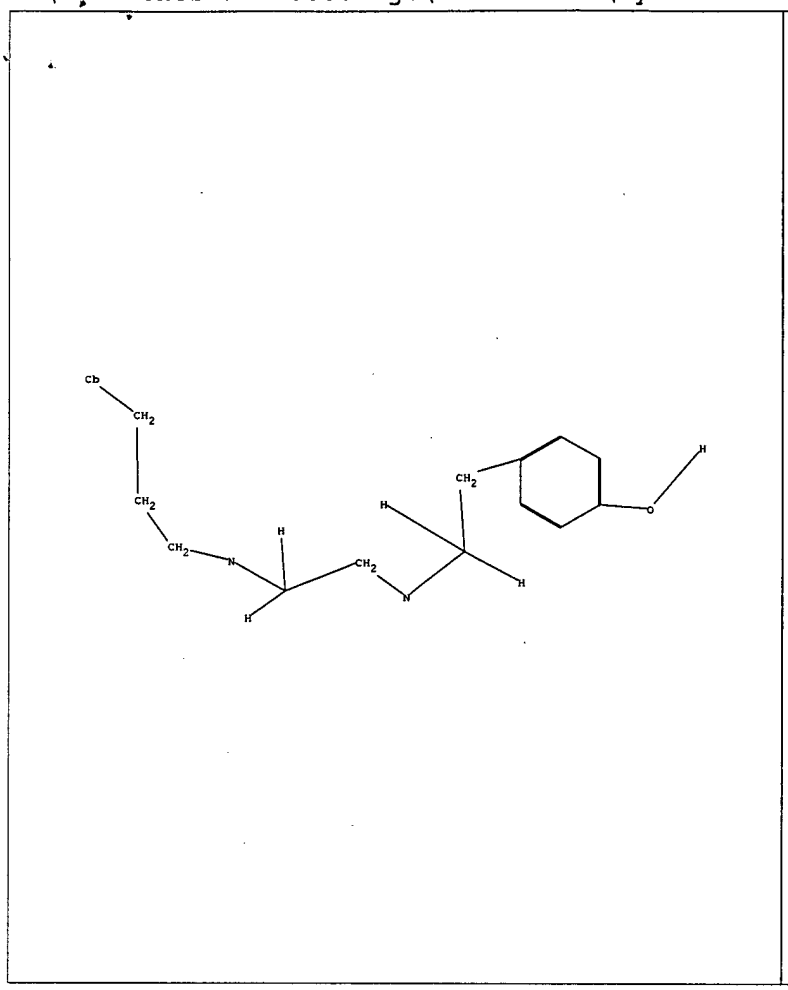

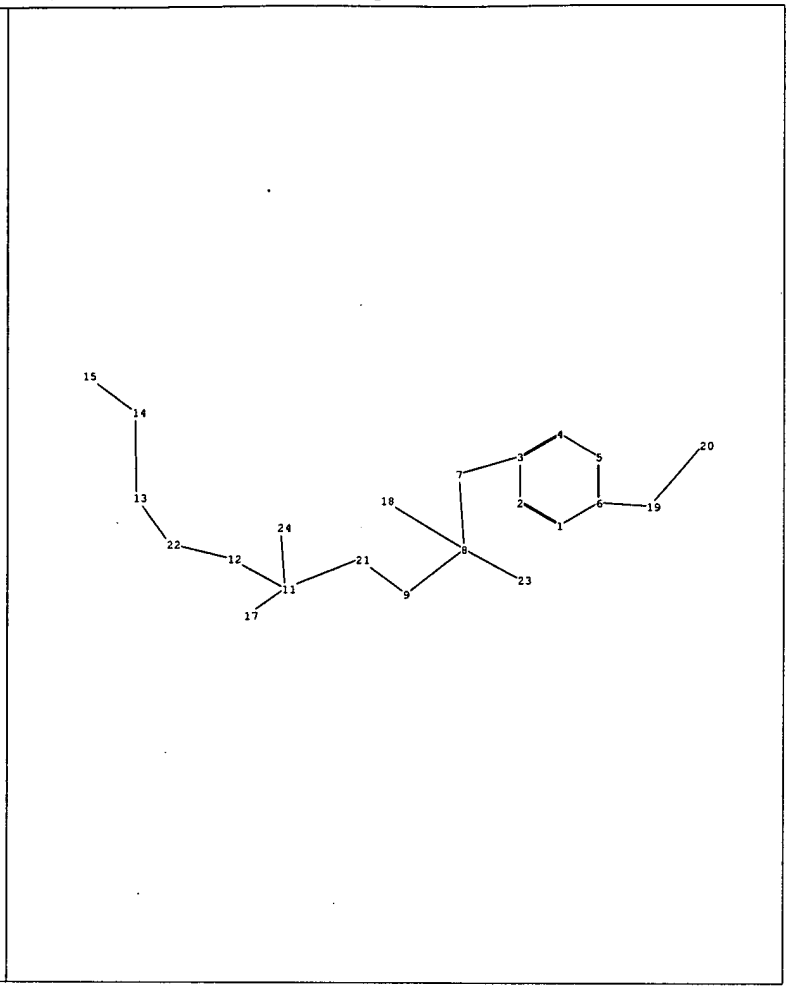

chain nodes :
7 8 9 12 13 14 15 17 18 19 20 21 22 23 24
ring nodes :
1 2 3 4 5 6
ring/chain nodes :
11
chain bonds :
3-7 6-19 7-8 8-9 8-18 8-23 9-21 11-17 11-21 11-12 11-24 12-22 13-14 13-22
14-15 19-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
6-19 8-9 11-12
exact bonds :
3-7 7-8 8-18 8-23 9-21 11-17 11-21 11-24 12-22 13-14 13-22 14-15 19-20
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:CH2

Connectivity :
15:1 M minimum RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 11:CLASS
12:CLASS

13:CLASS 14:CLASS 15:Atom 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:CLASS